University News

WEEKLY JOURNAL OF HIGHER EDUCATION MONDAY, JULY 3, 1995 Rs. 7.00

BHIM S. DAHIYA

New Market Economy, Education and Culture

K. ALUDIAPILLAI

Open Universities

ATMA RAM

Emerging Roles of Educational Heads

BEENA SHAH

Teachers in Higher Education

K. KASTURIRANGAN

A Working Culture

— Convocation Address

RELIGION AND PEACE

CUSAC FELLOWSHIPS

HRD PROJECT AT APAU

ORIENTATION PROGRAMMES FOR TECHNICAL TEACHERS

Association of Indian Universities

INDIAN COUNCIL OF MEDICAL RESEARCH

Applications are invited upto 31.7.1995 for the following posts at the Council's Headquarters/Institute :

(A) At the ICMR Headquarters, New Delhi - SENIOR DEPUTY DIRECTOR GENERAL TO HEAD THE DIVISION OF EPIDEMIOLOGY AND COMMUNICABLE DISEASES (One post). Qualifications & Experience : Essential : i) MBBS with M.D. in Microbiology/Parasitology/Epidemiology/Community Medicine/Health Systems research or related disciplines. **ii)** 15 years of research/teaching experience in the field of communicable diseases/Community Medicine/Epidemiology and related disciplines. **iii)** Original work as evidenced by publications in these areas. **Desirable :** Adequate managerial/administrative experience in responsible positions. **Job Requirements :** It is a top research management post. The incumbent will assist the Council in the overall planning, conducting, monitoring and evaluating research in epidemiology and all other aspects of communicable diseases (both intramural and extramural). He/She should be able to provide high level leadership in the identification, formulation and successful implementation of R&D programmes. He/She is also expected to interact with/review the work of a large number of ICMR Institutes devoted to research on various communicable diseases, as also Epidemiology/Communicable Diseases, in addition to a large number of extramural research projects in these areas and to collaborate with other agencies engaged in disease control and health research activities.

B) At the National Institute of Nutrition, Hyderabad - DIRECTOR (One post). This Institute which is engaged in top level basic and applied research in Nutritional Sciences has recently celebrated its platinum jubilee. The Institute has been responsible for initiating major research programmes in human nutrition and has also been serving as an important training centre in the South East Asian region for medical and paramedical persons in nutritional science. **Qualifications & Experience : Essential :** M.D./Ph.D./D.Sc. in medical sciences or life sciences with reseach experience of 15 years with original work in the field of nutritional sciences as evidenced by publications in standard journals/monographs etc. **Desirable :** Adequate Administrative/Managerial experience in responsible position in reputed Research Organisation. **Job Requirements :** The Director is expected to provide high level leadership in identification, formulation and implementation of R & D programmes and projects of National importance in the fields of human nutrition. He/She is expected to develop fruitful linkages with academic and professional institutions, Government and International agencies. He/She will have the overall responsibility for the working of the Institute within the framework of the ICMR system and for ensuring an atmosphere conducive to creative work.

Salary/Conditions of Service : The scale of pay attached to the above post is Rs. 5900-200-6700 plus allowances as per Central Govt. Rules. Medical aid and leave travel concession are admissible to the employees and his/her dependent family members as per Central Govt. Rules. Residential accommodation within the Campus of the Institute is available.

AGE : below 50 years. SC/ST candidates are allowed relaxation in accordance with Central Govt. Rules in force. Benefits of pension are admissible as per rules in force. Private practice is not allowed. However non-practising allowance @ Rs. 950/- p.m. on pay upto Rs. 5999/- and Rs. 1000/- p.m. on pay of Rs. 6000/- and above is admissible to medical graduates only as per rules of the Council. Application forms can be obtained from the office of the **Director General, Indian Council of Medical Research, Ansari Nagar, Post Box No. 4911, New Delhi-110 029.** The completed application form accompanied with crossed Postal Order(s) for **Rs. 8/- (Rupees Eight only)** payable to **DG, ICMR** should be sent to the Director General at the above address. **SC/ST candidates are not required to pay this amount.** Applications without postal order will not be entertained. Candidates called for personal discussion will be paid 1st class rail fare by the shortest route. No TA/DA is admissible for joining the post or on termination of appointment. Applications from the employees working under the Central/State Govt., Semi Govt. and Govt. controlled undertakings should be sent through their employers and should be received before the closing date alongwith the certificate of the employer that the applicant will be relieved within three months of his/her receipt of appointment orders. Advance copies will be considered subject to the condition that a '**No Objection Certificate**' from the employer is produced at the time of personal discussion. Separate applications needs to be submitted for each of the two posts. Applications received after the closing date will not be considered. The name of the post applied for must be indicated on the application. Incomplete applications will not be entertained. Candidates called for personal discussion have the option to answer in Hindi also. The Director General, ICMR reserves the right to short list the applicants to be called for personal discussion.

Those candidates who had applied earlier (i.e. in August/Sept. 1994) for the above posts need not apply again, but may update their bio-data and send it to the **DG, ICMR** clearly indicating the post for which they applied earlier.

Any CANVASSING by on or behalf of the candidates or bringing political or other outside influence with regard to the selection/recruitment shall be considered as DISQUALIFICATION.

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Editor :
SUTINDER SINGH

New Market Economy, Education and Culture

Bhim S. Dahiya*

The Elitist Shift

Some major developments of the last few yers, particularly the switch-over to the **new economic policy of liberalization,** have brought about significant changes in our social life which demand serious attention of *scholars and social analysts. On account of these changes, some of our* earlier formulations about the state of Indian society and the priorities and strategies we had earlier worked out for its reconstruction have been rendered rather inadequate, if not totally irrelevant. It has, therefore, become imperative for us to recognize as sharply and clearly as we can the overall character of the changed situation in which we are placed today as a nation and see how the tasks and priorities relating to the agenda of social reconstruction we had set before us in the fifties need to be redefined in the new context.

In the multi-dimensional process of social change that we have recently witnessed, the economic, political and cultural aspects are all deeply intermixed and are interdependent. It may not, therefore, be fair to pull out a single factor and study its impact on a particular sphere of our social life, although this is what I perforce will have to do when I draw attention to a restricted area of the subject and make a few preliminary observations on **how the policy of economic liberalization has affected the educational scene,** *particularly the functioning system, and how it has influenced the* general cultural environment in the country.

Let me make it clear in the very beginning that while I recognise the overriding necessity for adopting the policy of economic liberalization and see its efficacy in undoing or nullifying the negative consequences of the four-decade-long operations of a model of development under which the state played a pioneering role in the management of the country's economy and determined its direction and scope through a regime of controls and licences. I feel sad about the signals we are receiving now about the weakening of our commitment to the cause of uplift and welfare of the poor and underprivileged sections of our society. Whatever be the advantages of the liberalization policy in the economic field in terms of overcoming stagnation and providing a new fillip to our economy by bringing about an appreciable increase in its persistently sluggish rate of growth, it also marks a radical change in our social philosophy on account of which the emphasis has now shifted from the establishment of an egalitarian social *order to the encouragement of technological innovation, increased efficiency* and maximization of profits. Along with the dismantling of a shifting regime of bureaucratic controls which tended to kill all individual initiative, which generated passivity and parasitism among large sections of the common people, the policy of liberalization also unfortunately indicates a shrinking of our sympathies and concerns, leaving the unprivi-

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**Vice Chancellor, Kurukshetra University, Kurukshetra-132 119, (Haryana).*

leged to face the rigours of the pitiless logic of the market forces to fend for themselves or perish. The state welfarism of the Nehruvian era had its own severe limitations, but its substitution by the free-market economy where all investments are strictly governed by the notions of profit-making and no priorities are fixed on the basis of long-term development needs, where the policy of *protective discrimination* in favour of the disadvantaged groups is gradually discarded as a drag on our limited resources, where public investment in areas like health and education has shrunk in the proposition that this does not bring any immediate returns, and where the entire gamut of economic activity is sought to be hitched to the world market even if this involves the risk of detaching it from the needs and requirements of a vast majority of people living in this country, certainly it betokens legitimizing the tendency of the successful to secede from the rest of the society and delink themselves from those living in the morass of poverty, ignorance and disease. This growing tendency of elitism in our social philosophy as of pampering the consumer with a well-lined pocket is indictive of a decline in our idealistic fervour inherited from the national freedom struggle which had animated the vision of creating a just and progressive social order given to us in the fifties by Jawaharlal Nehru. State sponsorship of economic enterprises may have created many serious problems, but the policy of liberalization has unfortunately meant a wrongful shrinkage of the state's role as an active agent of social reconstruction. The state is being virtually reduced today to the role of an umpire whose utmost duty is to ensure that the rules of the game are observed by all the players active in the market field. Under the changed paradigms for the functioning of the state, creating facilities for the health and education of all, building the infrastructure of roads, transport, communications and power, undertaking programmes of economic and social uplift through eradication of poverty and unemployment, spreading of education no longer count among the serious obligations of the state towards its citizens. All these tasks are being gradually handed over to the interested private entrepreneurs who would make investments in the service sector and provide efficient services to those who can pay for them, or to those philanthropic elements and voluntary agencies who reflect the conscience of the society. State-sponsored welfarism is being dismissed today as a wishy-washy form of idealism which should not be relied upon. This elitist shift in our social philosophy, which the adoption of the policy of liberalization represents, becomes quite clear as soon as we turn away from the field of economics and focus our attention on the fields of education and culture.

A Challenging Enterprise

When education became in the fifties an integral part of the developmental efforts of the state, there was a strong emphasis on its rapid expansion at all levels, providing new opportunities for the underprivileged and disadvantaged sections of our society. Since the undertaking of social welfare measures on an ever-increasing scale was viewed by the state as a major social obligation it owed to its citizens, the government allocated more and more funds for opening new colleges and establishing new universities for strengthening teaching and research. There was also a very clear emphasis on greater social relevance of the curricula and courses of study. But the idea of social relevance at that time was not narrowly utilitarian, for education was viewed as a challenging enterprise for the expansion of intellectual horizons, for the cultivation of a rational outlook, for the refinement of our human sensibility. The current thinking on education has unfortunately put a check on the further expansion of higher education, curtailing funds available from the state agencies, narrowing down the meaning of social relevance, making it almost a synonym of sale-value in the market. This jettisoning of the state responsibility for providing the necessary resources, restricting its access to those who have the capacity to pay, has created new problems and challenges for educational administrators, such as Vice-Chancellors of the universities. Of course, making education an entirely state sponsored activity had also created several distortions and caused serious damage to the higher goals of education. Utter dependence for funds on the governmental agencies had led to excessive bureaucratization of procedures and structures as also to interference from the political sphere in the day-to-day functioning of educational institutions. It had also generated a spirit of passivity among teachers as all policy initiatives and powers had moved into the hands of the state bureaucracy or the top brass of the university administration. The spirit of apathy produced among teachers on this account led to a serious deterioration in the quality of their involvement in the teaching activity. The stagnation and routinization of education which this spirit of passivity and alienation produced had posed a serious threat to our educational enterprise, reducing it to almost a nullity. As a consequence of the awareness of distortions produced by making state the prime agent of social reconstruction that has come to us with the shift towards liberalization, we have become more keen to break the sloth and take initiatives at our own level. We have been forced to realize now that our courses have to be upgraded, our pedagogic skills and our knowledge of the latest developments in our chosen disciplines have to be continuously updated. The shock of recognition we have gone through has also made us aware of the walls of insulation we had created between the academic world and the larger public in the midst of which we continued to live in our enclosed assured space. We have now painfully realized that we shall have to give up the old habits of utter dependency on the state for funds as well as for initiatives and innovations. This means we shall have to establish live contacts with the larger community for raising funds as well as for seeking new inspirations. We shall also have to maintain and nourish institutional connection with our old students. The general lethargy and isolation of the academia have to be broken. All these can be viewed as the salutory effects of liberalization on the functioning of educational institutions. On the other side of the scale, the negative effects of liberalization are too serious to be ignored. The increasing resource crunch created by the new notion that education is not an obligation of the state but a business in the service sector to be rendered to the competing users does threaten to paralyse the functioning of many educational institutions, not in a position to undertake energetic measures for raising funds from alternative sources.

The more disturbing aspect of the liberalisation policy, however, is to look upon education in terms of the marketability of products, reducing it to the status of a commodity. Even if the pressures of the market cannot be ignored and should always be kept in view, even if the idea of social relevance of education is taken to mean employability of the students who have received education and training in different disciplines, it will be disastrous for a society to reduce education to the status of a commodity. The vocabulary of the market place is unfortunately being increasingly applied in the field of education compelling us to think more and more in terms of production of usable skills, promotion of investible human resources, and introduction of informational and managerial inputs. This is a disturbing trend which must be resisted. We must not yield to the pressure of this type of thinking, which has been made fashionable in this era of liberalization in which paramount importance is given to the logic of the market place. Education, to my mind, cannot be reduced into a business transaction where people compete with one another as customers for a limited purpose of making profit through exchange of marketable goods. I passionately hold that education is not a commodity and should not be treated as such. Any meaningful system of education transcends the limits of a mere transfer of informations, ideas or technical skills inevitably entailing a deeper engagement at the level of sentiments and emotions, ethics and morals, which distinguish man for machine.

Cultural Scenario

This brings me to the point where we should talk about the impact of liberalization on our larger cultural environment where we are concerned even more with the question of morals and manners of the members of our human society in this age of science and technology which is totally indifferent to the matter of morals and manners. Education is, of course, a major component of the cultural scenario of a society. While discussing the impact of liberalization we have already taken into consideration to a certain extent the relationship between liberalization and culture. Whereas liberalization breaks insularity and promotes exchange of ideas through an increased interaction with the larger world producing a broader cosmopolitan outlook, whereas it removes stagnation and orthodoxy, it also tends at the same time to bring down culture to the level of an entertainment. Our participation in culture tends to be on the pattern of being a consumer of commodity. The result is that culture tends to become a mere fetish, or a leisure-time mode of refreshment and emotional toning-up. Whatever makes us feel relaxed, whatever gives us momentary excitement, whatever helps us overcome our tedium, all that is looked upon as culture. Culture is actually produced slowly by a collectivity through the process of meeting the challenges posed by the actual conditions of existence. The common and shared part of the creative response to these challenges is what crystallizes as culture. Culture in this sense is actively produced and is not passively received as a special and refined commodity of rare quality and taste. The pressures being exerted today by the market forces tend to reduce culture to mere forms to be appropriated by detaching them from the processes through which both these forms as well as the substance they contain have been produced by a collectivity. Liberalization injects consumerish tendencies in our cultural environment. It, therefore, cheapens, degrades and homogenizes culture. Since as consumers we are generally swayed by the immediate or short-term requirements and needs, liberalization also tends to narrow our mental horizons. Culture, both at the level of the individual and the society, relates to the sense of being human we *visualize for ourselves, to the idea of meaningful exist*ence of self-fulfilment, which impels us into activity. This visualization and existence as human beings gets flattened out and narrowed down in a market-dominated social set-up. Whatever is not covered under the market-mechanism tends to be obliterated from our minds. This blankness or obtuseness linked with the valorization of the market forces is a really serious threat to culture which tends to reduce culture into a mere spectacle having only the surface and no depth. *It becomes something with which one can relate one*self only as a viewer from outside. It is true that today we cannot opt out of the world dominated by the values of the market, but in order to preserve the sense of a rich and meaningful culture we must develop a critical intelligence which can pierce through the surface and see what lies underneath. The phenomenal growth of information technology and the consequent expansion of the electronic media have made all the more necessary the cultivation of a critical faculty to visualize what is absent or has been missed out in what is being purveyed to us, a capacity to capture that part of the truth which is hidden or kept back along with an awareness which will show up the inadequacy of the half-truths being shown to us. It is only by cultivating this critical intelligence through the education of the humanities that we can escape the damage caused by the barrage of propaganda being constantly directed at us through the electronic media.

Another danger posed by the ascendancy of the market forces and the spurious culture being thrust upon us through the mass media is its sponsored concept of our identity as individuals living in private space in the present moment being incapable of or unwilling to share the larger concerns of common interest and significance. This type of purblind and smug individualism will erode our humanity and degrade our culture to a disturbingly low level. Special methods of making us aware of our common humanity, sharing our responses and concerns, evolving methods of combined intervention, will have to be evolved for saving our culture from degradation. The task, therefore, before the centres of higher learning in India today is to maintain the discipline of the humanities in the midst of the gignatic plethora of technology and business disciplines which have come to dominate our campuses as well as our consciousness. The effort in question is just like saving one's soul in the midst of a carnival of senses. Let's, therefore, find a way to absorb the new disciplines of science and technology, business and management in the traditional structure of liberal education which lays emphasis on the education of the mind rather than the acquiring of information and skill. Let's also find a way to withstand the onslaught of the tawdry ways of life on the everlasting structure of values all civilised societies have cherished as the core of their cultures. This concept of culture as well as education emerged in modern times from the movement of the Renaissance in Europe, which held above all the values of rationalism and secularism, of individual dignity and freedom, of civil behaviour and personal accomplishment. It were these very values which inspired the leading personalities of the Indian Freedom Movement and the Indian Renaissance, such as, Jawaharlal Nehru, and Rabindra Nath Tagore and gave a sense of purpose to the individual as well as society. Today, these values are under attack. We need to retain these values, without of course, remaining out of tune with our times. The new political and economic orders shall have to be reconciled to our now old cultural and educational orders. How do we do that is a matter of debate and concern for all of us.

Jamia Hamdard

Hamdard Nagar New Delhi 110 062

ADVERTISEMENT NO.1/95 DTD. 30.6.95

Applications on prescribed forms for the following positions are invited so as to reach the office of the **Registrar** by **31.7.1995.**

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Application forms alongwith details regarding eligibility/qualifications/experience can be had either in person or by sending a self-addressed envelope (22 x 10 cms) duly stamped of Rs. 5/- from the office of the **Registrar, Jamia Hamdard** on payment of Rs. 10/- in the shape of Indian Postal Order/Bank draft drawn in favour of the **Registrar, Jamia Hamdard, Hamdard Nagar University, New Delhi-110 062.**

DR. M. HAMIDULLAH BHAT
REGISTRAR

OPEN UNIVERSITIES

K Aludiapillai*

The twentieth century has witnessed many innovations in the field of education and the most outstanding among them can be said to be the founding of open universities from the point of view of providing greater access to education and training to large numbers of hitherto neglected and disadvantaged sections of the society by using the modern communication technologies.

Need for Open Universities

Higher education all over the world has been the preserve of colleges and universities. In this traditional system, only a limited percentage of those who desired to pursue higher education could find a berth. Due to constraints — mainly economic and social — many had to deny themselves opportunities for university education.

Realising the importance of education as a tool for upward social mobility more and more demands were placed on the existing system. People were keen to make good lost opportunities. There was a craving to acquire more qualifications to further one's career prospects and enlarge employment opportunities. Governments with their budgetary constraints were finding it difficult to provide further funds to a highly subsidised higher education system. There were clear signals that in due course higher education should be self supporting and not seek large bounties from the government.

In the above context the distance education mode of access to higher education gained ground. It started as correspondence education through institutional arrangements. Apart from provision of print material to the learner some institutions arranged for periodic personal contact programmes, study centres and other student support services. Even this type of distance education running almost parallel to the conventional or traditional system could not meet the aspirations and expectations of the society. Courses relevant to social needs and flexibility in the curriculum and entry requirements were not so easily coming forth. Access to learning had to be further liberalised and education democratised.

As an improvement over the correspondence education system, using multi-media in the teaching-learning process and providing the much needed flexibility in the entry requirements and in the curriculum, came upon the scene of the Open University.

Distinguishing Features

(i) Providing greater access to education is a unique feature of the open university system.

Formal educational qualifications have been liberalised for joining the various courses conducted by the university. For admission to undergraduate courses a pass in the foundation course or entrance test conducted by the university will suffice. No upper age limit is prescribed. Dropouts from conventional institutions of higher education can get admitted. Large numbers from remote corners and rural areas can get enrolled.

(ii) Flexible and need-based courses are offered. This fulfils societal needs and satisfies individual requirements.

(iii) Continuing education is provided to update the knowledge, skills and competence of persons who seek programmes in their area of involvement.

(iv) Irrespective of considerations of caste, colour, community, race, status, religion or gender, opportunities are afforded to all those who wish to be benefited by taking a course.

(v) Craft of teaching is converted into technology and the product is available to any one who needs it.

(vi) Though known by terms such as home study, owntime study, independent study, correspondence study, private study or external studies, the institutions offering these facilities are comparable with open universities.

Scenario in Select Countries

Universities in some countries have been permitting private appearance of candidates for their examinations since the middle of the nineteenth century. Correspondence courses were catching the imagination of people and the first half of the twentieth century witnessed expansion of these programmes. Print medium and the mail system were the backbone of correspondence courses. In Russia, Australia and New Zealand correspondence education had taken strong roots. Several universities in India, Australia and the USA provided facilities for private study. This was known by such different names as 'home study', 'independent study', 'external studies', etc.

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U K Open University

Through the Royal Charter 1969, the Open University was established in the UK. It became the first full-fledged university in the field of distance education. It is hailed as a landmark in the history of distance education since it provided for the integrated use of electronic media with print media in the area of higher education.

The British Open University offers a whole gamut of courses ranging from the B.A. to the Ph.D. degrees for those who wish to undergo such programmes. Adults wishing to have updated knowledge in their own careers can undergo programmes specially designed for them.

For instructional purposes the university uses print materials, radio and television. It also supplies kits to students for scientific experiments. Study Centres spread over the entire length and breadth of the country provide student support services. Students are evaluated continuously through assignments and regular examinations.

Free from the restrictions and rigidities of the formal system of education, the Open University facilitates open learning. Learning is made easily accessible to learners no matter who they are or where or when they wish to study.

Two interesting features in relation to the composition of students in British Open University deserve attention. One is that in the initial years one out of three students were teachers. At the end of the first decade of its functioning, this changed to one in seven. Another feature is that 41 to 45 per cent of the applicants are women since 1973 though in the early years it was low.

Allama Iqbal Open University, Pakistan

Initially known as People's Open University, this institution established in 1974 not only offers graduate and postgraduate courses but also certificate courses particularly for teachers. A number of programmes under the Integrated Functional Education Project and Civic Education Project are being offered.

Student support services are provided through study centres. Separate study centres exclusively for women students have also been functioning. A sizeable segment of rural students appear to benefit from this university which is put on par with the other conventional universities in the country. It is also worth noting that the methodology adopted by the university highly facilitates women students to take to the learning process without the need to leave their homes.

Central Radio and Television University, China

With the biggest population in the world, China, has been using the electronic media for adult education right from the sixties. In 1979 the Central Radio and Television University was set up in Beijing. This Central University and 43 provincial radio and television universities cater to the needs of the nation.

The most significant feature of the CRTVU is that it has opened the doors of higher education to the countryside and it has been found to be cost effective.

The range of courses offered through CRTVU is very wide. Courses in Engineering, Banking, Management, Accounting, Economics, Law, Library Science, Literature, Mathematics, Physics, Chemistry etc are indicative of the variety. Audio and video tapes are used extensively and print materials supplement the radio and television programmes. Students have to submit regular assignments and take end of the course examinations.

Sukhothai Thammathirat Open University, Thailand

With a view to reach out to the remotest areas in the country offering at the same time distance education in a variety of fields and provide the ideal answer to the country's crucial need for a 'second chance' education, the Sukhothai Thammathirat Open University (STOU) was established in 1978 in Thailand.

Today STOU is considered as a strong and model distance education institution in Asia. The STOU operates through such media as printed materials, audio cassettes, radio and TV broadcasts and personal contact sessions.

STOU's texts have been of such a quality as to be used by other universities and colleges. The continuing education programme provided by the University appears to be popular with people of all ages.

Open University of Sri Lanka (OUSL)

Established in 1980, the Open University of Sri Lanka offers Certificate, Diploma and Degree programmes in a variety of subjects using printed materials, radio and TV, cassettes, practicals, tutorials, counselling and residential schools. Student support services are rendered through assignments and regional study centres.

Right from its inception, the OUSL has been offering science and engineering programmes very effectively.

Indian Experience

The first open university in India was established in 1982 in Andhra Pradesh as a state university. In 1985 the national level Indira Gandhi National Open University (IGNOU) was set up. In 1987 the Kota Open University in Rajasthan and the Nalanda Open University in Patna were established. The Yashwantrao Chavan Maharashtra Open University was set up in Nasik in 1989 and Raja Bhoj Open University, Bhopal (Madhya Pradesh) in 1992. All the above four are state universities.

Indira Gandhi National Open University

The objects of the IGNOU as enumerated in the Act are as follows :

(a) advance and disseminate learning and knowledge by a diversity of means;
(b) provide opportunities for higher education to a large segment of the population;
(c) promote the educational well-being of the community generally;
(d) encourage the open university and distance education systems in the educational pattern of the country; and
(e) coordinate and determine the standards of such systems.

The university offers fifty eight Certificate, Diploma and Degree programmes and over 372 courses through the open learning and distance education system. As an apex body it acts as a coordinating and monitoring agency for the distance education system in the country. A Distance Education Council has been constituted in 1992 for this purpose. To train staff, academic and non-academic, it has set up a Staff Training and Research Institute of Distance Education (STRIDE).

IGNOU adopts a multi-media approach using print material, video and audio programmes, assignments and counselling sessions. Student support services are provided through 16 Regional Centres and 244 Study Centres spread over the entire length and breadth of the country. In 1995 the total enrolment has touched 242,000.

The latest development in ensuring the quality of the programmes conducted by IGNOU is the introduction of Academic Audit. Making effective use of technology the university has in 1994 established audio-tele conferencing facility connecting all the 16 Regional Centres and three State Open Universities with IGNOU headquarters.

Cooperation with international organisations has enabled the IGNOU to secure facilities for training and obtaining state-of-the art audio visual equipment for its Post Production Centre. The Commonwealth of Learning has recognised IGNOU as a Centre of excellence in Distance Education in 1993.

Dr. B.R. Ambedkar Open University, Hyderabad

Established in 1982 as Andhra Pradesh Open University, this university offers programmes leading to masters and Bachelors Degrees, Diplomas and Certificates. Over 100 Study Centres spread throughout the State including rural and remote tribal areas offer student support services.

Yashwantrao Chavan Maharashtra Open University

Started in 1989, the major objectives of this University include widening the access through distance education particularly to higher, technical and vocational education to larger sections of society. The university strives for work culture and tries to achieve economies of scale through mechanisation, computerisation and ensure efficiency and accountability at every stage of its functioning.

The distinctive features of this open university are:

(a) The goal of the university is to become a 'Mass University';
(b) Most of the programmes are offered in Marathi — the regional language;
(c) Emphasis is on vocational/technical courses;
(d) Self-sufficiency in operational costs is a commitment; and
(e) Linkages are so developed as to facilitate the developmental and transformational processes in the society around.

The university is planning to work with the non-government organisations (NOGs) through the medium of academic programmes. Regional Centres at seven places, 72 Study Centres for the degree programmes, 35 sub-centres for preparatory programmes and recognised work centres for imparting practical training indicate the decentralised delivery mechanisms of the university. In 1993-94 a total of 38,269 students were enrolled in the various programmes offered.

The Kota Open University in Rajasthan had 14,394 students on its rolls in 1989-90. The Nalanda Open University had not launched any academic programme till 1993. The Raja Bhoj Open University, Bhopal has been set up recently.

Potential for Growth

The open universities all over the world have become increasingly popular on account of their flexible admission requirements, curriculum and pacing of learning taking education to the very doorsteps of the learner.

As an agency developing human resources and imparting skills it has no parallel. By making proper tie up arrangements and establishing appropriate linkages with industry it has proved that quality education can be imparted through distance education methods.

The strides made by the open university system in China clearly indicate that the economic development and industrial advancement is possible if human resources can be carefully trained in various areas ensuring that the quality of instruction imparted is kept up.

With the increasing levels of literacy, particularly in the developing countries, there is bound to be greater clamour for access to higher education. The priorities of the governments in the matter of allocation of funds being what they are, it is not likely that higher education would get a big chunk. In fact the need of the hour is cost effective education. Open universities appear to be the most suitable agencies to provide mass education in a cost effective manner.

Once there is assurance of quality and acceptance by the community, the open university system is bound to grow and grow fulfilling societal needs.

With the rapid strides witnessed in the sphere of science and technology it has become necessary for an educated individual to keep himself informed about the latest developments and for those in service to update their knowledge and skills. By its flexible pattern of reaching everyone who needs it, the university can contribute in a big and effective way for enriching the quality of human life and offer ample scope for fulfilling the aspirations and intellectual cravings of the common man.

In this context, the potential of the open university system as a tool for individual growth and national development appears to be great. Learning at any age is possible and it is easier to transport knowledge to people rather than transport people to places of knowledge.

Conclusion

Education today is slowly acquiring the characteristics of industry. It caters to the needs of the masses. Therefore it has to gear itself to large scale operations and if need be on a global scale. Closely connected with the scale of operations is the cost factor. The cost effectiveness of the operations assumes a lot of importance.

Industry is not only cost conscious but also quality conscious. Any dilution in quality will eventually lead to the easing out of the scenario. All out efforts should be made to ensure customer satisfaction. The education offered by open universities has to be designed for the masses, cost effective, customer oriented, and to top it all, responsive to the changing needs of the times.

As of now, the hope for the future in the realm of education in terms of access, cost effectiveness and societal needs lies in the growth and effective functioning of open universities. They may well serve as a panacea for many of the ills affecting education. Never before has such an opportunity been thrown open. It has to be seized and fully utilised for the good of all.

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Emerging Roles of Educational Heads

Atma Ram*

Whatever the education policy, it is the education heads who actually operate it and in the long run make for its success or failure. They not only implement it but also in the process generate new ideas and devise innovative projects. Their role in the whole system is central and most significant. The National Policy on Education (1986-92), therefore, takes note of this vital issue. It aptly observes: "A very important role must be assigned to the head of an educational institution." In all the three stages — teaching, supervision and planning or management — head is the key person; the person who really matters or should matter. If the head is all right, he/she, at least, creates no difficulties, most of the problems are solved amicably. The Head is helpful everywhere. But, and it is a big but, all goes wrong if something is wrong with the head. No institution can function successfully with a weak or incompetent head. Indeed, the educational head, like the head of human body, is most important for existence and development.

A head naturally requires frequent guidance and orientation. When a person is promoted or selected to head an education institution, he is called upon to shoulder new responsibilities, to face entirely new challenges. Although, he may have the requisite potential and initiative to handle the new assignment, yet he urgently needs some training in skills of the trade and administrative acumen. Nobody is born as an administrator. There is, therefore, not only a dire necessity to undertake orientation once in the beginning but also periodically. The Policy clearly underlines this : "Special attention will be paid to the training of educational planners, administrators and heads of institutions .... Heads will be specially selected and trained". Institutions like NIEPA, NCERT, USEFI, and Administrative Staff College of India frequently arrange such courses. But experience shows that many States unfortunately do not encourage participation. Nor do they often organise such refreshers on their own.

It is imperative to make such a training essential for heads of institutions. Otherwise very good teachers may fumble as heads and they are not at all to blame for this. Regular (and compulsory) orientation courses/seminars will help them become effective and discerning educational administrators. States could conveniently organise this training/workshops in their SCERTs, Academic staff colleges, and Institutes of Administration.

To have a longer stint as heads and administrators, we should catch them young. The recruitment and promotion rules for heads of schools and colleges should provide for at least 50% direct recruitment to make way for fresh blood. They should also be ensured at least a five-year stay in an institution. An educational institution is often known by its head. Famous institutes had renowned persons as heads. But the head cannot make a perceptible headway and perform his leadership role, if his tenure is brief or uncertain. No institution is built overnight. It requires time to grow. And, more importantly, the head should have full authority, all powers. In any case, the captain and his team should be allowed to play the full match uninterruptedly. The commentators or critics should not disturb or destabilise them.

Posts of heads of institutions should not be kept vacant nor should adhocism in this respect be resorted to. Such situations tend to paralyse the whole administration and make the institution an orphan, a rudderless boat. Heads' own problems should be solved on priority. Then alone can they resolve others' difficulties and concentrate wholeheartedly on the overall development of their institutions. They also require sufficient autonomy in the area of their work. The policy stresses their responsibility and "establishing the principle of accountability in relation to given objectives and norms." But accountability and autonomy go side by side. Heads of educational institutions have to bear the brunt of decisions taken, as they are the key-persons on the spot. They know and understand the field-reality better. Therefore, they should be frequently listened to, their viewpoints be respected, and they be fully supported.

There is a general tendency to ignore them. When things go wrong, only they are blamed, and some of their duties assigned to 'generalists', persons outside the department. This is both sad and bad, as it usually

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Teachers in Higher Education

Beena Shah*

The Indian Higher Education System has undergone tremendous qualitative and quantitative changes during the past few decades. It would be worthwhile tot review, very briefly, in chronological order, the depth, spatial spread, diversity and the dimensions of our education system. We have had a long tradition of learning and scholarship from the ancient times. Takshashila and Nalanda enriched our knowledge until the beginning of the medieval age. Subsequently, muslim rulers encouraged higher education through *Madarasas*. Besides teaching theology, these imparted learning in the traditional areas of humanities, social sciences and sciences, as well as in the art of healing. The traditional learning in ancient and in medieval period was greatly influenced by religion, and quite a good number of educational centres developed around the ideologies of Bhaktism and Sufism during this period.

The year 1857 is a landmark in the history of our higher education since foundation of a modern university was laid this year and the first university, was established in Calcutta. Soon after two more universities were established at Bombay and Madras, on the model of the London University. The Panjab and Allahabad universities were founded in 1882 and 1887 respectively, which were almost similar in character as the first three universities. The government resolution on education in 1913 defined the concept of jurisdiction which helped in establishing the universities at Dhaka, Aligarh and Banaras, followed by those at Rangoon, Patna, Nagpur, Mysore and Hyderabad.

During the colonial period, the main focus was to create an educated class which could act as an interpreter for the Britishers to help them govern India effectively. Indian education was literally biased and had little or negligible content of science and professional disciplines. During the first non-cooperative movement, in 1920, Gandhiji founded institutions such as Gujarat Vidyapeeth, Kashi Vidyapeeth, Bihar Vidyapeeth, Tilak Maharashtra Vidyapeeth and Jamia Millia Islamia. Emphasis in these educational institutions was on building the strength for national movement.

Expansion of Higher Education

The year 1947 constitutes another landmark in the history of university education in India. Soon after independence, our universities were faced with new challenges — political as well as economic. From 1947 to 1949, seven more universities came into existence. The growth of Indian higher education over a period of 135 years has no parallel. There have been rather dramatic changes during the 46 years post-independence period. For instance, in 1950, there were 28 universities and 695 colleges with a student enrolment of 1,74,000 and 21,264 teachers in the system. Now, we have over 200 universities and 7500 colleges with student enrolment rising to nearly 4.6 million and number of teachers to 2,70,000.

Even with this expansion of higher education institutions, the percentage of youth population which receives higher education opportunities is dismally small. As the time goes by, the demand for higher education is going to increase steeply. The educationists and planners will have to adopt innovative ways of enhancing educational opportunities. While we do so, we need to ponder over a serious mismatch and some contradictions. The statistics show that 20% of over 17 million educated unemployed are graduates and postgraduates.

There is, therefore, a very serious need to correlate higher education, training and research with manpower needs. Universities have to work together with various sectors for deciding the content and the scope of the areas of study. We also know that over 8,000 recipients of doctorate degrees are available to us every year, but they do not have any meaningful absorption in the developmental sector. Hence, we need to redesign our education and research programmes by breaking away from the classical barriers and water tight compartments which have been unproductive.

Selection and Professional Growth of Teacher

The teacher is a very important component of the higher education system. The selection of a teacher has to be done very carefully as he will be in the system for quite a long time and may influence it substantially by his capabilities and activities. Similarly, possibilities

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for professional growth of teachers have to be looked at carefully so that they could receive the latest knowledge in their specialities. The general norms for selection of teachers and avenues for professional growth of teachers in the institutions of higher learning may be studied as (a) Prior to 1986; and (b) After 1986.

Prior to 1986

There are significant recommendations in the reports of earlier Education Commissions for better facilities for teachers and their professional growth. The recommendations in Kothari Commission report are noteworthy. It clearly recommended providing better pay scales, living conditions, conducive working atmosphere and other facilities to the teachers at various levels. Prior to 1972, the salary of the university teachers was meagre. The pay and allowances of teachers were revised in 1973. The minimum qualifications of the teachers were also prescribed: a teacher must have consistently good academic record with a doctorate degree for university departments and an M.Phil for colleges. If suitable candidates were not available with M.Phil./Ph.D degree, this condition could be relaxed at the time of selection. However, the teacher so appointed would obtain the research degree within five years, failing which, further annual increments will be stopped.

For college teachers, the University Grants Commission (UGC) started a scheme of faculty improvement. Under this scheme, a teacher could go for completing his doctorate degree in another Institution with duty leave for three years with full pay and some pocket allowances. A number of college teachers availed of this opportunity and enhanced their academic competencies. In the eighth plan, this opportunity is available for one year only, either for doing M.Phil. or for completing the doctorate work.

The selection of the faculty in most of the universities is made through selection committees consisting of two-three subject experts, head of the department and the Vice-Chancellor. In my opinion, this is not a very correct procedure to assess the academic capabilities and other qualifications meant for communicating knowledge by the teachers. We will return to it later.

As far as provisions for professional growth are concerned, they were not linked with the future promotions. However, Summer Schools, Seminars, etc were organised in different disciplines in various parts of the country. The basic objective of these schools was to impart indepth knowledge in a particular subject/discipline. This definitely enhanced the research capabilities.

After 1986

Another landmark in higher education system is the revised pay scales as recommended by Mehrotra Committee, and which have been effective since January 1, 1986. The pay scales recommended and accepted by the Government of India are respectable and better than those for the employees of several sectors. This committee has also made for maintenance of standards in higher education system. Now the entry in higher education sector is not only through interviews by a selection committee, but the candidate has to first qualify a national level test known as National Education Test (NET) — to become eligible for the post of lecturer in a university/college. A few states have accepted this criterion of selection. It is hoped that others will soon follow suit. Apart from this, the recruitment is on the basis of merit through an all India advertisement. The minimum qualifications for appointment to the post of lecturer are Master's Degree in the relevant subject with at least 55% marks or its equivalent grade and a consistently good academic record. The M.Phil and Ph.D. in the relevant subject may be prescribed in appropriate cases as desirable qualification. Also, the minimum qualifications should not be relaxed even in respect of candidates who have research degrees like M.Phil./Ph.D. The UGC has provided the exemption from passing National Education Test (NET) to the following :

1. Those who have obtained M.Phil. Degree by March 31, 1992; and
2. Those who have submitted the thesis before December 31, 1993.

Apart from this, a lecturer in a university or college who does not obtain M. Phil./Ph.D. degree as the case may be, or does not have to his/her credit research work of equivalent standard, he shall not be entitled to draw the annual increment beyond the stage of Rs. 3,400 in the scale of pay of Rs. 2200-4000.

Code of Professional Ethics

Besides the above conditions, there is a provision of code of Professional Ethics for University/College teachers. The University Grants Commission has prepared the code of ethics through a task force for the university/college teachers. This briefly prescribes the desired conduct in respect of the following:

- Teachers and their rights;
- Teachers and their responsibilities;
- Teachers and the students;
- Teachers and colleagues;
- Teachers and authorities;
- Teachers and non-teaching staff;
- Teachers and the society.

This document lays down broad guidelines as to what the teachers should do. It clearly prescribes the behaviour of teachers and their actions in keeping with the environment around them.

In practice, we wonder, if the Code of Professional Ethics for the teachers, as envisaged in this document, is being followed in any university of the country.

Professional Growth of Teachers

The terms and conditions attached to the new pay scales envisage participation, at regular intervals, in appropriately designed refresher courses/summer institutes as an integral part of the package to ensure professional growth of teachers. The University Grants Commission, the Indira Gandhi National Open University (IGNOU), the state governments and other appropriate agencies were advised to take steps to introduce programme of continuing education in universities/colleges. There are promotional avenues for the lecturers to be placed in senior scale of Rs. 3000-5000 who have

(a) completed 8 years of service after regular appointment or have reached a basic pay of Rs. 2800, whichever is earlier;

(b) obtained an M.Phil. or Ph.D. degree, as the case may be, or have to his/her credit research work of equivalent standard;

(c) attended two refresher courses/summer institutes, each of at least four weeks' duration; and

(d) have earned consistently satisfactory performance appraisal reports.

There are further promotional avenues for the lecturers for placement in the selection grade of Rs. 3700-5700 for those who have

(a) completed 12 years of service in the senior scale or have reached a basic pay of Rs. 4375, whichever is earlier;

(b) attended two refresher courses/summer institutes after placement in the senior scale; and

(c) have earned consistently satisfactory performance appraisal reports.

The placement in the senior scale or selection grade will be through a process of selection by a selection committee to be set up under the statutes of the university concerned.

These provisions are envisaged to provide professional growth and career advancement to the teachers. However, in practice, in most cases, everybody who has completed a specific period of service, has been placed in these grades. The very purpose of gaining professional competencies through refresher courses has thus been defeated.

Academic Staff Colleges

For providing facilities for refresher courses, the University Grants Commission had set up 48 Academic Staff Colleges all over the country. At present, only 45 are functional. These colleges conduct refresher courses in different areas with the help of the existing faculties of their university and also through guest faculty. As far as the quality of refresher courses is concerned, it is not very satisfactory because of management problems and non-availability of qualified experts in time. Therefore, the basic concept of enhancing the professional competence of the teachers as envisaged in the original document is not being completely fulfilled. Apart from refresher courses at Academic Staff Colleges, about 200 departments in various subjects are selected for imparting orientation courses.

Performance Appraisal of Teachers

This aspect is an essential element in the management of educational institutions and has been incorporated into the design of the career advancement of the teachers. The UGC had constituted a task force on the subject which after discussions with the representatives of the Associations of University College Teachers, designed the format for evaluation of performance of teachers. It has in fact developed two formats — one to be filled in only once by those who were in employment at the time of the introduction of the scheme and also by the new entrants at the time of their joining the institution, and the other which has to be filled in for all the teachers after every academic year. This format seeks details of academic qualifications, research experience, training, research projects carried out, seminars/conference/sympoaia/workshops attended and organised, teaching experience, innovations/contributions in teaching, extension work/community work undertaken & participation in corporate life. This self appraisal has to be assessed by the Principal of the College/Vice-Chancellor of the university every year.

We wonder any institution in the country is following this provision and evaluating the performance of teachers regularly.

Future Directions

(1) As pointed out earlier, the present procedure of selecting the teacher must be modified. Firstly, a screening committee should scrutinise the applications, and on the basis of criteria fixed for screening, five candidates against one post may be invited to face the selection committee, which may consist of the experts, head of the department and the Vice-Chancellor. The candidate should present details of his achievements and future programmes before this committee, where faculty members of the concerned departments may also be present but without any voting rights.

(2) The appointment should be made only on contractual basis for five years in the first instance. Next tenure of five years may be granted after an evaluation of the academic achievements and performance appraisal of the teacher by an expert committee. Similarly, the next promotion to the Reader or Professor's post also be given on the basis of a thorough screening of academic performance. This will provide incentives to the teachers to do research work and perform their duties effectively. At present, in most of the universities and colleges, the research work is not progressing well as there is no provision of incentives for the teachers.

(3) The refresher and orientation courses are needed to be strengthened and imparted through qualified experts in the concerned subject areas.

Emerging Roles of Educational Heads

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demoralises them, and it smacks of ulterior motives. Education should always and everywhere be managed by those who know, who are in the profession and invariably have direct stakes in the system. This is what the advanced countries have been doing with astounding success. The educational administrator should not be made a puppet, a scape-goat or kept busy, day and night, in issuing transfer orders of his staff. He should always head all committees on educational activities; in his field, he should be the sole authority. As they say, it is better to be the head of a cock than tail of a lion. It will generate dynamism, confidence and self-respect in him. At times heads of privately managed institutions do better since they often enjoy autonomy and wield sufficient powers.

The National Policy on Education makes "inducting more women in the planning and management of education" as one of the guiding considerations. This is most desirable for the uplift of women and education of girls. However, in practice, even women schools and colleges are headed by males, while women heads are available in plenty. Indeed, in general, women alone should head girls institutions, since they can better look after girls and their needs. Again, many non-government institutions have done so to great advantage.

Heads should remain in their institutions/stations for most of the time. Even their presence makes a difference, has a salutary impact. They should also meet classes regularly and be real teachers. As heads, they should finely combine in themselves all the three roles: technical (Teaching), supervisory and conceptual. Frequent outside visits/tours dislocate the smooth functioning of the institutes. When the cat is away, rats naturally play, (and spread plague). A head owes duties to students, teaching and supporting staff, local administration, parents, guardians, and community at large, local units of other departments/agencies, education department, and the parent university or the school board of education. He should strive hard to get guidance from all these sectors and constantly lead the institution forward "to an ever-widening thought and action."

An educational institution is always known by its achievements in studies, sports, National Cadet Corps (NCC), National Service Scheme (NSS), cultural activities, and maximum teaching days. Outside, it is often known by three things — its product i.e. students, its teachers and their publications, and its overall discipline. The institution is developed, built, and later judged through the above-mentioned parameters. The head, considering students and teachers as his hands and brains, should try to build its image, to raise it to enviable heights of glory and fame.

In reality, the role of an education head is most significant in all stages of education. He/She should be carefully selected, ever encouraged, continuously trained and trusted. This will strengthen the entire process of education and consequently make for a system that works, is workable and worth-working.

A WORKING CULTURE

Dr. K. Kasturirangan, Chairman, Space Commission, and Secretary, Department of Space, Government of India, delivered the Convocation Address at the eleventh convocation of the Bharathidasan University, Tiruchirappalli. He said, "An important achievement we scored besides the successes of complex space launchings, is that we created men and women who could do all this as a team. Underlying the successful endeavour of this nature is the manifestation of a working culture that calls for effective communication among highly specialised individuals and groups on one hand and attainment of highest degree of professional excellence at individual level on the other hand, together leading to realisation of a complex system. This culture is essential for success in several areas of national endeavour that call for synthesis of multiplicity of disciplines encompassing science, technology, engineering and even arts and culture to realise well defined end goals." Excerpts

We are living in an age of unprecedented scientific and technological revolution. In the long history of existence of human species on our planet, which extends over a million years in past, civilised form of human life dates back only to a few millennia. Printing which is an important form of recording and transmission of knowledge came into existence in China some 2000 years ago. However, in the last one and a half century such developments have been taking place at an accelerated pace, never witnessed earlier. The electric lamp, internal combustion engine and telephone which are taken for granted today were invented just more than a century ago. The first flight of aeroplane, the revolutionary invention of transistor, entry of television into our homes, controlled break up of atom, advent of space age and marvellous inventions in bio-technology have all occurred in less than one hundred years in past. It is said that over 90% of the greatest scientists of the earth are alive today, meaning that most of the developments in the world have occurred in the last 30-40 years. This exponential growth of technology has been making a tremendous impact on our life styles and has been responsible for a great cultural shock. The rate at which developments are proceeding in several fields is such that it is extremely hard to predict developments even for a reasonable time frame in future. However, judging from the current trends, one can anticipate even greater strides in several fields, such as, communications, information technology, transportation, energy sources and bio-technology. It is pertinent to see how well we are equipped to handle this situation so that we could learn to use this for our advantage.

For a nation to be in the forefront of societal advancement, it is absolutely essential that it has necessary expertise and preeminence in utilisation of science and technology. With ever increasing population and other associated problems of global and local varieties, the exploitation of science and technology to provide the world with a clean, safe and potentially cheaper alternatives to improve the quality of life on the earth assumes paramount importance. But, the new technologies, unfortunately, become obsolete even before they reach the potential customers, thanks to newer discoveries and inventions. The developing countries try to overcome this dilemma by going in for imported technology options, with a hope to leap-frog in technologies to catch up with others. Unfortunately, here again, the technologies overtake them so fast that the race is over even before it is started. Added to this, the technology transfer from developed countries is incomplete as necessary capacity transfer does not occur. Many of the developing countries face a bleak future with such strategies that result in inadequate capacity transfers. Many things have been told about adopting appropriate technologies for the developing countries. Here too, there is a need for initiating necessary process of technological updation and related training to achieve self-reliance in all essential spheres of technology, as this appears to be only way to break away from the vicious circle of perpetual dependence.

The basic process which provides one with the capacity to handle and effectively participate in a fast changing technology environment is education. Education imparted in a university aims to provide the basic foundation to learning and for acquiring capabilities to deal with real life problems. In the contemporary context of rapid developments, learning has to be a continuing process, even after the university education.

Indeed, the capacity of a nation to develop economically, socially, and culturally, depends largely on the power to develop and utilise the capabilities of its own people. An analysis of the level of development, globe-over, brings out clearly the undoubted role of education in the overall national development. Developing countries which have 40-50 per cent literacy rates show a national per capita gross income equivalent to Rs. 18,000 per year, whereas, the developed countries which have more than 90 per cent literacy rate have their national per capita gross income around Rs. 2,50,000 per year. This large imbalance could also be linked with the investment made by these countries on education. From the data available, 40 developed countries accounted for 86 per cent of global expenditure on education, whereas the corresponding share of developing countries, numbering 161, is only 14 per cent. It is hardly around one-twentieth of that in developed countries. The problem is further compounded by the lack of adequate and quality teachers as well as effective teaching aids.

A way out of this predicament is to use advanced technology, such as, space technology that has potential for rapid and economically attractive solutions to the problem. Such solutions have been adopted very effectively in countries with large populations like China, for training the teachers. In each province, television stations are set up in their capitals for educational purpose and these are used to broadcast the educational programmes to a large number of people. Indian contributions towards developing educational and developmental communications were recognised world-over through the SITE experiment conducted during 1975-76. With the advent of INSAT satellites, a variety of programmes to cater to distance education have been implemented. The inherent advantage of a space based system is the rapid coverage and the resultant vast outreach. At present, the satellite television could access 80% of our population, which is very significant in terms of numbers. The studies conducted on the relative costs of imparting distance education vis-a-vis the conventional method show that the annual cost per student for a graduate programme through distance education involving television ranged only 44% to 34% of the cost of conventional method. There could be significant economic benefits, if a large number of people are to be educated rapidly through distance education employing advanced technologies like space. The INSAT system is already being utilised for disseminating educational TV programmes, interactive training programmes for industries and business sectors. Recently, a channel in INSAT-2 satellite was dedicated solely for developmental communications and educational training purposes. One of the basic premises in going for developmental communications is that it can effectively address many facets and phases of education, beyond the university system — particularly for overcoming obsolescence in a fast changing technological environment and for rapidly bringing social transformation.

Convinced of the capabilities of communication satellites in distance education and eradication of illiteracy, particularly among the rural masses which represent 75% of India's population, Indian Space Research organisation is working on a new concept of a dedicated satellite mission. This aims to disseminate programmes through the most powerful audio-visual medium, which will be specifically tailored to meet the basic requirements of rural areas. The programmes will deal with imparting relevant knowledge on health, hygiene, environment, family planning and better agricultural practices in each of the regional languages for transforming the rural society.

The message I would like to convey is that if we have to advance socially and economically, we have to strengthen our education, eradicate illiteracy and pursue learning even after the completion of formal education at a university. We should use new technologies to facilitate rapid access and spread of ideas. With the advent of space technology applications, tremendous opportunities have opened up for production of high quality software and other related educational programmes. It is here that we need creative talent, not only in science and technology, but also in arts and culture. At this juncture, it is only appropriate to examine a broader but a related issue, that of development of indigenous technology to meet the social objectives.

There is always a question as to whether one needs to develop a technology which is already developed elsewhere. While it is not necessary to reinvent the wheel, one should acquire capability to absorb the technology, apply to ones own needs and further improvise the same. This means that one should establish a reasonable level of autonomous technological capabilities. In the modern competitive world, in fact, even this is not sufficient. In areas which are important to our national priorities, the attendant imperatives should drive us to the contemporary levels of excellence and maintaining the pre-eminence. This ethos which was nurtured in a few areas of our national scientific endeavour such as space, atomic energy, and integrated guided missile programme, did demonstrate accomplishments which are contemporary to technological excellence in the most advanced countries of the world. The development efforts in these programmes are characterised by infusion of expertise from several branches of engineering along with the most recent innovations to meet demanding performance standards. In all these programmes, young men and women educated at our universities contributed through their research, development and organisational skills. This demonstrates the great potential which lay hidden in each one of you. What is needed is proper opportunity and your own determination to seek or even create the opportunity and then work through to bring out your best.

Taking the example of our space programme, in which I have been long associated, I would like to illustrate how a sustained goal oriented effort produces results. The Indian space programme which was initiated in a modest way about three decades ago, had two clear-cut goals which still guide its development. These are, self-reliant technology development and becoming second to none in the application of this advanced technology to the problems and needs of our society.

The tangible results of space endeavours are that India today operates two major state-of-the-art satellite systems of her own, namely, INSAT-2 and IRS series of satellites. INSAT-2 satellites, which are stationed in geo-stationary orbit, which is 36,000 kms above earth's equator, provide a variety of communications services including telephony, television broadcasting, meteorological observations, radio networking, search & rescue and automatic disaster warning services. There is a steadily growing demand for these satellites not only to meet our national needs but also for international use on a commercial basis. The leading international telecommunications organisation INTELSAT, which is the most demanding customer is terms of satellite performance requirements, recently signed a contract to lease communication equipments onboard our future INSAT-2E satellite. This demonstrates the maturity of INSAT's technological level in terms of international standards.

In the area of space based natural resources survey and management, the state-of-the-art Indian Remote Sensing Satellites, IRS-1A, IRS-IB and IRS-P2, are today providing data useful for several applications, such as, crop acreage and yield estimation, drought monitoring and assessment, flood mapping, landuse and landcover mapping, wasteland mapping, ocean/marine resources survey, urban mapping, mineral prospecting and forest resources survey. Many of these applications have already become an integral part of our National Natural Resource Management System. Our Integrated Mission for Sustainable Development (IMSD), launched on experimental basis, in June 1992 for generating action plans for locale specific development using mainly IRS data, has attracted worldwide attention with many countries evincing keen interest. What better example can be there than the Integrated Mission for Sustainable Development (IMSD) to show how relevant can be a high technology like space for grassroots development. You will be surprised to know how the implementation of the prescriptions on soil and water conservation in Ananthpur district of Andhra Pradesh has resulted in the farmers, who had migrated away, to come back and raise two crops a year; a credible achievement considering that the district has the second lowest rainfall in the country.

Thus, today India stands in the forefront, even among the advanced nations, to own and operate a constellation of state-of-the-art remote sensing satellites and putting them to use for applications of direct relevance to the national development. The planned launches of the follow-on satellites in this series, like IRS-IC, and IRS-ID show the commitment of the space programme to provide continued and assured data services to the user community. At the time of its launch later this year, IRS-IC will be the most sophisticated civilian remote sensing satellite in the world. On account of these accomplishments, the remote sensing satellites of ISRO did not lag behind to exploit the commercial opportunities and to carve a niche in the global market. Our recent agreement with the leading US company, EOSAT for the reception, processing and marketing of the IRS data all over the world establishes unmistakably the supremacy we have attained in satellite remote sensing. We are also providing necessary satellite mission control support services for many of the international satellite missions.

While looking at the role of satellite technology in the context of social application, it should be noted that the satellite itself is just one facet. In the case of INSAT, its presence in space would generate immense possibilities arising out of its vast outreach. In the context of educational applications, there are enormous opportunities for creative work, particularly for generating high quality software for education, which is a crucial input for the success of the application. Several new business opportunities are energised by satellite applications, e.g., a satellite over our region could cover India and neighbouring parts of our region having instantaneous access to a large population, which could be nearly one fourth of the global population, a tremendous resource for business development. On an equal footing, the continuing education imparted to the different sections of our society like farmers, industrial workers and small scale professional business enterprises on improved methods of resource utilisation and new techniques could generate secondary and tertiary activities which could stimulate a vibrant economic and employment generation activities. Additionally, in the case of a communication satellite, the direct business generated for industries to provide the ground equipment and ground facilities is three to four times the investment in space.

A comparison on similar lines in the case of the IRS mission reveals that currently more than 4000 resource scientists spread across 23 State Remote Sensing Centres, 5 Regional Remote Sensing Centres, 15 major user organizations and 300 other data utilisation groups are carrying out remote sensing activities for a variety of resource applications. There are still several possibilities for the use of this data, particularly in the context of the rapid industrialisation of the country and the attendant needs of remote sensing data by the private entrepreneurs in areas such as environment impact assessment and site location. The reason why I am bringing this aspect of the implementation of space satellite systems is because of its tremendous implication in the opening up of new opportunities in areas such as ground communication systems, instrumentation, software engineering, resource science and management related activities and so on. Obviously, they are opportunities which could be seized upon by the younger generation with its exciting challenges.

India's forays into commercial world of space closely followed the emergence of IRS and INSAT-2 spacecraft as systems of global relevance. Both these spacecrafts took off as central elements of our national systems, following ISRO's well planned approach to build experimental systems and then complex operational systems. They emerged to meet diverse needs of national development. When they were created, they employed technologies which are on cutting-edge and thus showed their relevance to meet some of the global demands. Cost competitiveness, constant drive for technological upgradation, reliability and commitment for continuity are the key characteristics which enabled India's wider role in the global context in this field. Perhaps, this is a very unique model of a developing country setting up a system for its needs and transitioning to global market.

The development of launch vehicle technology is another important facet of our space programme. It is an example of our determination to provide the space services in a wholly self-reliant manner. While PSLV, which had its first successful flight in October 1994, will enable us launch our IRS satellites into the required polar orbit, GSLV, whose development we have taken up now, will enable us to launch the INSAT class of satellite also from our own soil.

The path towards these goals was not rosy and it has taken us through many trials, tribulations and even a few disappointing failures. An important achievement we scored besides the successes of complex space launchings, is that we created men and women who could do all this as a team. Underlying the successful endeavour of this nature is the manifestation of a working culture that calls for effective communication among highly specialised individuals and groups on one hand and attainment of highest degree of professional excellence at individual level on the other hand, together leading to realisation of a complex system. This culture is essential for success in several areas of national endeavour that call for synthesis of multiplicity of disciplines encompassing science, technology, engineering and even arts and culture to realise well defined end goals.

The launch vehicle programme demonstrates how, by synergising the efforts of thousands of scientific personnel, be it in the academic institutions, R & D laboratories or industries, it can result in mastering the technologies which are complex and presently the preserve of a handful of nations. The enviable achievements of the space programme also is a case in point to show how frontier technologies can be absorbed and built up with a judicious utilisation of the country's R & D and industrial infrastructure. For example, PSLV alone involved over 150 industries and tens of R & D and academic institutions. Such an orchestrated effort additionally results in several gains and spin-offs to the participating agencies. In the case of industries, gains include upgradation of technological skills and reliability culture with attendant possibilities for improved and new products in other areas. In the case of academic and R & D institutions, such efforts throw up new opportunities and challenges to work in frontier areas of science and technology. More than 225 technologies developed

(Contd. on page 20)

HUMAN RESOURC

Central Government Expenditure on Human Resou

	Expenditure (Rupees Crore)			
	1989-90 (Actual)	*1990-91 (Actual)*	*1991-92 (Actual)*	*1992-93 (BE)*
Non-Plan Expenditure on HRD				
1 Food subsidies	1,240.42	1,102.06	1,128.13	902.92
2 Education, sports, youth and welfare	295.07	257.75	301.23	277.74
3 Health and family welfare	100.20	82.32	110.83	98.60
4 Water supply, sanitation, housing and urban development	34.07	3.15	34.04	35.76
5 Welfare of SC, ST and OBC	1.50	Negl	Negl	Negl
6 Other social services	93.68	80.07	85.50	107.63
7 Total (1 to 6)	1,764.94	1,525.35	1,659.73	1,422.65
8 Total non-plan expenditure	32,757.88	34,275.56	31,852.51	30,509.61
9 Ratio of 7 to 8 (per cent)	5.39	4.45	5.21	4.66
Plan Expenditure on HRD				
A Education, arts and culture	480.94	435.43	393.06	395.48
B Health and family welfare	414.81	625.70	435.81	470.24
C Water supply, sanitation, housing and urban development	256.00	85.02	334.48	254.26
D Welfare of SC, ST and OBC	172.84	151.60	163.88	166.86
E Social welfare and nutrition	151.80	168.23	163.48	191.78
F Total (A to E)	1,476.39	1,465.98	1,490.71	1,478.62
G Total plan expenditure	13,786.88	12,724.87	7,323.36	6,174.52
H Ratio of F to G (per cent)	10.71	11.52	20.36	23.95
I Total central expenditure on social services (7+F)	3,241.33	2991.33	3150.44	2901.27
II Total central expenditure: plan and non-plan (8+G)	46,544.76	47,000.43	39,175.87	36,684.13
III Ratio of I to II (per cent)	6.96	6.36	8.04	7.91

Deflator : The constant price estimate has been calculated using the GDP deflator at market prices.
Source : S.P. Gupta and A.K. Sarkar. Fiscal Correction and Human Resource Development : Expe
Central and State Levels. *Economic and Political Weekly.* March 26, 1994.

LOPMENT DATA - 2

ENT (1980-81 PRICES) AND PERCENTAGE GROWTH RATES

	Growth Rates (Percentage)					
93-94 (BE)	1989-90 (Actual)	1990-91 (Actual)	1991-92 (Actual)	1992-93 (BE)	1992-93 (RE)	1993-94 (BE)
15.81	4.70	-11.15	2.37	-19.96	-10.36	0.45
00.34	15.64	-12.65	16.87	-7.80	1.20	-1.47
08.69	32.94	-17.84	34.63	-11.03	-0.28	-1.66
39.96	–	-90.75	980.63	5.05	11.40	5.38
Negl	-6.83	–	–	–	–	–
17.83	-41.01	-14.53	6.78	25.88	47.43	-6.52
82.63	5.35	-13.57	8.81	-14.28	-4.17	-0.50
499.1	4.63	4.63	-7.07	-4.22	-0 50	-3.77
5.19						
04.18	-15.95	-9.46	-9.73	0.62	5.21	21.92
93.57	-11.63	50.84	-30.35	7.90	23.48	10.30
53.16	4.28	-66.79	293.41	-23.98	-27.55	45.73
88.94	7.38	-12.29	8.10	1.82	2.48	12.50
20.77	5.61	10.82	-2.82	17.31	30.13	3.78
60.62	-7.25	-0.71	1.69	-0.81	5.63	18.16
69.84	-2.07	-7.70	-42.45	-15.69	-3.17	10.98
23.64		7.58	76.69	17.64	9.09	6.47
43.25	-0.79	-7.71	5.32	-7.91	0.47	8.78
58.94	9.29	0.98	-16.65	-6.36	-1.00	-1.07
8.97						

(*Contd. from page 17*)

for the space programme, several of them as spin-offs, have been transferred to industries. Many of the technologies find important uses in our daily life. I am sure you will be interested to know that the technologies developed for space have been used in prosthodontics, artificial limbs, rice husk boards, metal fire extinguishers, polyols for thermal insulation, to mention a few.

While evolving our space programme, deliberate steps were taken to ensure active role for academic and research institutions. One such example is the institution of the Sponsored Research (RESPOND) scheme under which the Universities and academic institutions are provided grants to carry out research related to the space programme. The interaction between space and institutions has further increased in recent years with the establishment of space technology cells in a few reputed institutions. The idea here is to gradually grow the capabilities in a few institutions through such linkages so that these units can provide direct R & D support to the space programme on a sustained basis. Such schemes cover all facets of space activities, that is, science, technology and applications. There are several instances where academic and R & D institutions have provided direct high technology inputs to the space programme — the development of the maraging steel, magnesium lithium alloys, sophisticated welding technologies, aerodynamic studies, development of polymers, composites, to name a few.

Another aspect of the linkage between space and academic institutions is the efforts related to the introduction of space education in the university curricula to ensure continuous availability of the right talent to the space programme. For instance, a detailed syllabus on remote sensing has been provided to the UGC. You are aware of the significant contribution of the School of Earth Sciences of Bharathidasan University to the space remote sensing in close association with the National Natural Resources Management System.

Recognising the competence of India in space science, technology and application, developed in close cooperation with the users, industries and academic institutions, the United Nations has selected India for establishing a Regional Centre for Space Science and Technology Education to cater to the needs of the Asia Pacific Region. Projection of India in this new role clearly testifies the end-to-end capabilities that the country has achieved in space, with special emphasis on education related aspects and international cooperation.

Thus, in citing Space as an example to illustrate the country's capabilities in utilising hi-tech inputs for endeavours, which are socially relevant and also globally competitive, we can see that India could be second to none in such endeavours. We are quite aware that there are many other fields in our country where we have achieved such preeminent levels.

Globally, we have been witnessing increasing trends towards market oriented economies and breaking of trade barriers, particularly after the recent changes in geo-political scene. In this regard, we are aware of our own initiatives on liberalisation in the economic front. There is great accent on competition and for private investment including foreign investment. These market oriented economic policies underscore the importance of maintaining competitiveness not only at local level, but also at international level. For this, front ranking R & D is essential in the long run. Again, it is not merely innovation and technology development that assumes importance but a whole chain of activities leading to the application and commercialisation of technology. Therefore, we need a thorough assessment on areas where we could have inherent advantages and we should give a high priority to mount our R & D efforts with goals to achieve the best in the world. India is endowed with abundant high quality technical and scientific human resources, which need to be organised and harnessed for economic activities.

As representatives of the new generation, you have the onerous responsibility not only to continue these important initiatives, strengthen and expand them but also chart out new and innovative pathways. India's future is certainly assured. This hope is not based on dreams and wishful thinking but because of concrete examples of our accomplishments demonstrating our ability to stand among the comity of nations.

But in carrying out all these efforts, we should not lose sight of the lofty ideals of Bharathidasan who dreamt of society with justice and equality of opportunities for all Bharathidasan's immense belief in mankind and this fervent desire to establish a free and just society, wherein man can develop his personality fully, is worth emulating by the younger generation. In his own words :

In the long annals of life
And of human acts
Have you ever heard of a force

Greater than that of human kind?
Humanity is a majestic hill
From its broad pinnacle of equality
View the whole space of earth and heaven
With discriminating rational eyes;
And grasp this wisdom that humanity
Is life's essential strength and power.

Excerpts from the Report

by

VR. Muthukkaruppan
Vice-Chancellor
Bharathidasan University, Tiruchirappalli

Today, almost all our Departments have Postgraduate programmes whose scope and content could provide a smooth transition for our students to an academic and scientific career. During the year under review, M.Sc. Physics and M.Tech. Remote Sensing have been added to our long list of courses.

To be an active partner in the current Information Revolution around the World, we have initiated steps to establish the Bharathidasan Informatics Centre (BIC), through which our academics in the campus and the affiliated colleges can have ready access to research publications all over the world.

The National Facility for Marine Cyanobacteria (NFMC) sponsored by the Department of Biotechnology, Government of India has completed its second phase of expansion with the addition of Mass Cultivation Tanks for Marine Cyanobacteria and one more floor of the building, to accommodate the expanding R & D of the Facility.

Our prestigious Bharathidasan Institute of Management has been approved by the AICTE and provided with a substantial UGC grant of Rs. 1.72 crores for its further development.

The Centre for Non-linear Dynamics is poised for a big leap forward, thanks to the research grants flowing from the Department of Science and Technology in a big way, in due recognition of its advanced research in a thrust area.

The School of Energy, in addition to the teaching programmes, has taken up many industry-based consultancy projects and this year it has successfully designed, tested and commissioned the world's first fluidized bed industrial toxic waste incinerator.

Our Centre for Remote Sensing has been recognised by the Ministry of Human Resource Development, Government of India for strengthening the infrastructure in Remote Sensing. It has also been recognised by ISRO for conducting training programmes. The Department of Chemistry has received a UGC grant of Rs. 45 lakhs as part of its Special Assistance programme.

Our university faculty members have been sanctioned research projects for over Rs. 2.75 crores, by various funding agencies during the year under review.

Curriculum Development Cell

The Curriculum Development Cell, is currently engaged in getting the syllabi for all the undergraduate programmes "re-structured", with emphasis on application, general awareness and social consciousness. The introduction of a Double-major system is also underway in those colleges which could opt for it. Further, the curriculum for several career-based diploma and certificate courses have also been designed. Even students in the regular courses in the colleges have been permitted to undergo these diploma/certificate programmes under the Evening Session/Correspondence stream concurrently.

Academic Staff College

The Academic Staff College organised Refresher Courses in Mathematics, Chemistry and English and also an Orientation Course for the benefit of college/university teachers. Further, the ASC organised several special programmes including Computer Awareness Programme for the Principals/ Administrative Staff of Colleges in Tamil Nadu and Kerala and a State-level workshop for the Controllers of Examinations of the Universities and the Autonomous Colleges.

Library

The library has expanded its reference service by opening a Text-Book Study Centre at our Town Campus at Kajamalai, for the benefit of the students of the city colleges and Distance Education.

Among others, our Kabadi Team won the South Zone Championship.

The Yoga Centre is offering a Teacher Certificate Course and also a Diploma Course in Yoga.

Centre for Distance Education

In addition to our MCA, B.Ed. and other programmes which are most sought-after, we are launching a quality MBA programme from the next academic year under Distance Education, with the expertise of our Bharathidasan Institute of Management. We are also extending some of our programmes for the benefit of students from our neighbouring states.

Orientation Programme on Population Education and Development

The Population Education Resource Centre (PERC), Department of Adult, Continuing Education and Extension, Delhi University organised a one-day Orientation Programme for College Principals and Faculty Members at the Dr. Ram Manohar Lohia University, Faizabad. Inaugurating the programme, Professor Agne Lal, Vice Chancellor, Dr. Lohia University, said that Population Education could be viewed from three major standpoints i.e. (i) Population Explosion; (ii) Human Resource Development; and (iii) Character-building and Moral Education. Citing examples from Ancient Indian culture, he stressed the need for planned, people oriented development. Population Education in universities and colleges, he said, must penetrate at the grassroot level. Professor Lal complimented the Population Education Resource Centre of Delhi University for strengthening the activities in the universities and colleges of Faizabad.

Dr. P.P. Singh, Acting Director, in his welcome address, said that Dr. Lohia University had conducted several debate competitions, quizes, and declamation contests to ensure youth mobilisation. He urged the principals and faculty members to help in mobilizing the students for this national goal. He said that Mahatma Gandhi, Jawaharlal Nehru and several prominent leaders of India had cautioned the country against population explosion. He narrated various activities conducted by the University under population education clubs in the adjoining communities.

Mr. Rajesh, Project Officer, said that Delhi Univrsity was one of the 12 PERCs in India for providing technical resource support in terms of learning materials (print and audio-visual), training, curriculum-development, monitoring and evaluation. Delhi University had so far conducted 15 Orientation Programmes for the college principals and faculty members and training of teachers in Uttar Pradesh under Population Education Resource Centre.

Professor S.C. Sinha, Ex-Director, Centre for Adult, Continuing Education, Faizabad and Director, Sharamik Vidyapeeth called upon the universities to prepare motivational materials for the students and teachers. In spite of 10 years of educational interventions, population education had still not been accepted in the system of higher education amongst the larger sections because educational/motivational materials had not been prepared in bulk. The efforts must be intensified to prepare the motivational materials, he added.

Dr. Tripathi, Project Officer, Dr. Lohia University, Faizabad stressed the need for further strengthening of population clubs, and to intensify the activities in the communities. The participants suggested that population education be included in undergraduate and postgraduate curricula to register long term impact of the programme. They also suggested provision of incentives for mobilization of large number of students.

Navigational Electronics Unit at Osmania

The Research and Training unit for navigational electronics of the Osmania University is reported to have earned Rs. 72 lakhs from a major project called "signal processing algorithms for radar seeker" funded by Defence Research & Development Organisation. The project developed signal processing algorithms for the detection, identification and contracting of ground targets from ground/air base radar.

The unit is now actively engaged in studies in a satellite based navigation system called Global Positioning System (GPS), which is expected to replace the conventional navigation systems by 2010. Future Air Navigation System (FANS) committee for India will look after the implementation of this programme. Some pioneering work is under way for this system at the navigational electronics unit. As part of the construction work, the unit has developed an application software and delivered it to Bharat Electronics Limited, Bangalore and Hindustan Aeronautics, Hyderabad, for incorporation in the indigenous GPS receivers being developed.

Prof. M. Malla Reddy, Vice-Chancellor of Osmania University, commended the work of the navigational electronics unit, saying that it earned in all Rs. 1.1 crores towards consultancy work, and a grant of Rs. 2 crores from the Department of Electronics for its research programmes. The Andhra Pradesh Government made it a permanent establishment of Osmania University by funding its recurring expenditure.

The unit has two well equipped laboratories, a signal processing laboratory and a microwave and navigational laboratory. It has modern computers to analyse data.

CSIR MoU with British Varsity

The Council of Scientific and Industrial Research (CSIR) and the South Bank University, London recently signed a memorandum of understandings (MoU) for development of joint research projects for a period of five years. The MoU was signed by Mr Dilip Kumar, Joint Secretary, on behalf of CSIR, and Prof Mike Trevan, Dean, on behalf of the university.

The cooperation will include workshops and exchange of visits of students and research and academic staff.

The areas identified for joint cooperation initially are food, biotechnology and disease resistance in plants. Central Food Technological Research Institute, National Botanical Research Institute and National Chemicals Laboratory will be the participating CSIR laboratories.

Orientation Programmes for Technical Teachers

The All India Council for Technical Education (AICTE) has identified 22 Academic Staff Colleges at different Universities to provide facilities for induction training of newly appointed lecturers and with upto 5 years of services in University Departments of Technical Education and Engg. Colleges. Teachers selected for the programme are to be treated as on duty with full pay and allowances by the sponsoring institute. The host institution will provide lodging and boarding facilities to outstation participants and TA will be paid to them as per rule. In case any University is unable to make lodging and boarding arrangements, DA will be paid in cash to the participants.

The schedule of orientation programmes to be conducted during 1995-96, as received from the University Academic Staff Colleges are: (1) Aligarh Muslim Univ. (4.9.95 to 25.9.95); (2) Univ. of Bombay (Schedule awaited); (3) Univ. of Delhi (July/August 95'); (4) Devi Ahilya Univ. (10.7.95 to 29.7.95); (5) Gujarat Univ. (Schedule awaited); (6) Himachal Univ. (25.9.95 to 14.10.95, 30.10.95 to 18.11.95); (7) Karnataka Univ. (June/July 95); (8) Kurukshetra Univ. (10.7.95 to 29.7.95); (9) Univ. of Mysore (Schedule awaited); (10) Osmania Univ. (Schedule awaited); (11) Panjab Univ. (Schedule awaited); (12) Univ. of Rajasthan (10.7.95 to 29.7.95); (13) Utkal Univ. (Schedule awaited); (14) Bharathidasan Univ. (23.8.95 to 19.9.95);

Further details may be obtained from the Director of Academic Staff College of concerned University.

MDU Plans New Courses

Maharshi Dayanand University plans to introduce several new courses form the coming academic session. These courses are : a five-year Master's in business management and another such course in Law, a three-year Bachelor's degree in pharmacology (B.Pharm), a post-M.Sc. diploma in industrual sciences, a diploma in electronics in the Department of Physics and an M.Sc. in biotechnology. Admissions will be made through entrance tests.

Several new job-oriented courses are also on the anvil, it is reported.

Japanese Consultants Visit BRAOU

Mr. Akemitus Mochizuki, General Manager, International Cooperation Department, Audio Visual Consultant Centre (AVCC), Japan and Mr. Yoshio Tsunatori, Senior Specialist, Audio Visual System Design and Computer System Design, International Cooperation Division, Sony Corporation, Japan currently working on IGNOU-2 project installation at IGNOU, New Delhi, recently visited Dr. B.R. Ambedkar Open University (BRAOU), for providing assistance as also cooperation in setting up the Audio Visual Centre and related matters in the University. Prof. S. Bashiruddin, Vice-Chancellor, BRAOU briefed them about the role of AVP&RC in the preparation of audio visual materials for various courses of the University. He also emphasised the need for Japanese Grant Aid in setting up the technical facilities in the new studios being established in the campus for producing quality programmes.

The consultants visited the new studio block and held discussions with the Director, AVP&RC, Production and technical staff regarding the requirement of equipments and technical facilities for the Centre. They were also taken round the Computer Centre, Faculty building and Library.

New Courses at Women's Varsity

The Department of Continuing and Adult Education, S.N.D.T. Women's University, proposes to introduce two new professional courses from this year. The courses are (i) a Certificate in catering management, and (ii) one year certificate course in children's garments.

Diploma Course in Sports Physiotherapy

The Guru Nanak Dev University is reported to have introduced a one-year diploma course in sports physiotherapy from the coming academic session. There will be 10 seats available, out of which seven will be reserved for students of physical education. Three seats are reserved for BAMS/MBBS students. Admission will be made on the basis of a joint entrance test.

We Congratulate ....

Prof. G. Ram Reddy, Chairman, Indian Council of Social Science Research, who has been awarded the prestigious Award of Excellence in Distance Education by the International Council of Distance Education (ICDE) and the Commonwealth of Learning in recognition of his work in the area of open learning and distance education.

News from Agricultural Universities

HRD Project at APAU

The Andhra Pradesh Agricultural University (APAU) proposes to launch a 60-crore human resource development project, jointly funded by the World Bank and the Indian Council of Agricultural Research, from this academic year.

The multi-pronged project is aimed at improving the teaching standards, purchase of modern equipment and computerisation in its 13 constituent colleges besides sending scientists abroad to study the advanced technologies for acquiring latest technologies of improved crop varieties.

This was disclosed by the Vice-Chancellor of the APAU, Dr. M.V. Rao, after releasing the "Vyavasaya Panchangam", an annual publication of the APAU in Hyderabad recently. The Panchangam is a compedium of all useful information on agriculture, animal husbandry and home science.

Dr Rao said the University publication was a ready reckoner for farmers in effectively following the seasonal operations in the fields from time to time. The farmers almanac, he said, comprised several technologies put in popular style encompassing a package of practices of various commercial crops and horticultural crops grown in the State apart from dairy farming, poultry, sheep rearing and fishery. It also served as a reference material to practitioners, extension personnel and others in the agriculture and allied fields.

Dr. Rao pointed out that the application of pesticides had increased alarmingly in the State with overdose and usage of banned chemicals becoming the order of the day. This, he felt, had resulted in the biological system getting adversely affected. In several districts such as Krishna, Guntur, Prakasam, West Godavari and East Godavari, the rampant usage of pesticides had reached a stage wherein pesticide residue had been traced in the mother's milk, he said.

Dwelling into the achievements of the Univrsity, Dr. Rao said the long-cherished desire of the farmers belonging to the Krishna district had beed fulfilled with the setting up of the Mango Research Centre at Nuzvid with special emphasis on exports. Mango research centres at Anantharajapeta and Sangareddy were also contributing for the percolation of latest technology in mango cultivation to the grassroot level.

The Vice-Chancellor underscored the need for the development of the Hyderabad airport into an international airport keeping in view the great potential for export of various horticultural crops such as mango, sapota, myriad flower varieties, aromatic plants, being extensively grown in various parts of the state. Export of these could fetch valuable foreign exchange. Setting up of glass houses and polythene houses would also help in fostering the floriculture practice, he said.

The University, he said, was also supplying foundation seeds to progressive farmers in 108 mandals identified by the State Agriculture Department for paddy cultivation as part of the "Seed Village Concept". The farmers would develop these seeds and later share it with other farmers, he said and added that the task was undertaken due to the inordinate delay in certified seeds reaching the farmers.

CUSAC Fellowships for HAU

Chaudhary Charan Singh Haryana Agricultural University (CCSHAU) has been awarded two

Academy Exchange Fellowships by the Commonwealth Universities Study Abroad Consortium (CUSAC) for the year 1995-96. Under this fellowship two faculty membes of the University will visit commonwealth countries to augment bilateral study programme between member universities of CUSAC and CCSHAU. This was revealed by the Vice-Chancellor, Dr. S. Arya on his return from Perth (Australia) after attending the meeting of the Consortium held recently.

He said that a team of two teachers comprising Dean, Postgraduate Studies, Dr. K.S. Panwar and a senior teacher of Statistics, Dr. Deepak Grover would be sent to work on implementation of students exchange programme with the University of Guelph (Canada) and the University of Hull (UK).

Dr. Arya further said that in the Perth meeting the representatives of the participating universities reached a consensus on setting a central coordinating machinery for the effective implementation of CUSAC programmes. It was decided that Commonwealth Secretariat located in London would act as Coordinating Agency for two years and thereafter this responsibility would be shouldered by the Association of Commonwealth Universites, also based at London. The Coordinating Agency would also help formulate the MoU among member universities for exchange of students and teachers.

Dr. Arya revealed that CCSHAU had already implemented the bilateral study programme. Consequently one Mr. Tim Bryson, an agriculture student in the University of Adelaide (Australia) had arrived and undertaken his routine studies. In exchange, one student from his University would shortly leave for Australia to study for a semester at the University of Adelaide. He said that this bilateral study programme of the CCSHAU would definitely prove instrumental in internationalisation of the students of the CUSAC member universities.

Besides 22 of the 28 member universities of the Consortium, 80 more commonwealth universities participated in the meeting.

TNAU tie-up with Australian Varsity

The Tamil Nadu Agricultural University (TNAU) is reported to have entered into a tie-up with the Western Sydney Univrsity, Hawkesbury, for experiential learning with Ford Foundation aid. According to Dr. S. Sankaran, Vice-Chancellor, the programme would ultimately lead to the networking of nine universities of the world. These universities would work like a 'think tank' for research and development.

The Ford Foundation had advanced US$ 74,000 for the project. Under the scheme, exchange of teachers between the two universities and joint workshops would take place.

Dr. Sankaran said the World Bank had sanctioned a Rs. 39 crore project for 'agricultural human resource development', to be implemented in the next four years, starting from July. The objective of the scheme would be to strengthen the existing infrastructural research facilities and increase the capabilities of teachers and researchers.

One third of the fund would be spent on the purchase of sophisticated research equipment and Rs. 7 crore for imparting training for researchers. Research would be encouraged at the post-doctoral and doctoral levels and through short-term courses.

There was also provision for inviting external experts to the university to stay for a semester.

Summer Institute on Animal Breeding

A Summer Institute on Advanced Techniques and Teaching Methodologies in Animal Breeding was recently organised at the Chaudhary Charan Singh Haryana Agricultural Univeristy (CCSHAU). Inaugurating the programme, Dr. S. Arya, Vice-Chancellor, called upon the participants to conduct research on such lines as demand for animal products in the country could be met comfortably. Focussing the attention of animal breeders on the ever increasing number of stray animals, he stressed the need for evolving effective measures to contain this menace. Expressing satisfaction over the research work being done by the College of Animal Sciences in developing high yielding breeds of livestock and poultry, Dr. Arya appealed for preserving and improving the yield of indigenous breeds like Murrah buffalow for which the state of Haryana was known the world over.

Dr. Vidya Sagar, Dean and Organising Chairman of the Institute, in his address said that in the 20-day ICAR sponsored Summer Institute knowledge and skill would be imparted on various aspects of computer and biometrical techniques, advances in researches in animal breeding policies as well as curriculum development, lesson planning and educational technology.

Twenty-five animal breeders from all over the country attended the Institute.

News from UGC

Countrywide Classroom Programme

Between 8th July to 21st July, 1995, the following schedule of telecast on higher education through INSAT-ID under the auspices of the University Grants Commission will be observed. The Programme is presented in two sets of one hour duration each every day from 6.00 a.m. to 7.00 a.m. and 1.00 p.m. to 2.00 p.m. The programme is available on the TV Network throughout the country.

Ist Transmission

6.00 a.m. to 7.00 a.m.

8.7.95

"Science Aptitude Quest - Part I"

"The Story of Rice"

9.7.95

"Career Counselling : Foreign Languages as a Career"

"Simply on Symphony"

"The Week Ahead"

11.7.95

"The Chola Temple Quartet - Part II"

"Invitro Propagation of Plants"

"Near Net Shape Processes"

13.7.95

"Cost Reduction Techniques in Housing"

"Crystals and Cancer"

"The College of Combat :Defence Services Institute of Leadership and Warfare - Part II"

15.7.95

"ScienceAptitude Quest - Part II"

"Commerce and Management Education"

"Paper Boats in Turbulent Streams"

16.7.95

"New Horizons - XXVI"

"Wooden Imprints : Block Printing"

"The Week Ahead"

18.7.95

"Question Time"

"The Butterfly Effect"

"Energy Flow - Part I"

20.7.95

"Flexible Manufacturing System"

"The Right to Choose : Ballot Power"

"Future Tense in English : A Pedagogic Perspective"

IInd Transmission

1.00 p.m. to 2.00 p.m.

8.7.95

"Kerala Kala : Kathakali"

"DIKARA - The Traditional Folk Art of Kumaon"

"The Week Ahead"

9.7.95

No Telecast

10.7.95

"Oscillation : Important Parameters"

"Telephone Manners : Personal Calls"

"Cyclones : When Disaster Strikes"

"Ambassador of Culture"

11.7.95

"The Discoverer of Polarography"

"Prof. N.S. Bendre : Evolution of an Artist"

"Oxygen Radicals and Antioxidants - Part X : Antioxidar Therapy in Physical Exercise"

12.7.95

"Indo-Roman Trade - Part II : Coins"

"Mangrove - Facts and Policies"

"Use of Isotopes in Nutrition"

13.7.95

"Application of Information Technology Tools through Satellite - Part I"

"Making of a Newspaper - Part VI : Design"

"Shakespeare - As We Like Him"

14.7.95

"New Horizons - XXVI"

"Young Scientist"

"Yoga in Education"

15.7.95

"Career Counselling : Fine Arts"

"Tribute to an Immortal : Col. C.K. Nayudu"

"The Week Ahead"

16.7.95

No Telecast

17.7.95

"Question Time"

"Telephone Manners - II : Official Calls"

"Volcano"

18.7.95

"Understanding Hydrocarbons"

"Prof. N.S. Bendre : The Teacher"

"Oxygen Radicals and Antioxidants - Part XI : Tobacco and Oxygen Radicals"

19.7.95

"ASTREE, L'espace Retrouve"

"Hridayakunj - The Soul of Freedom Movement"

"Virus and Cells"

20.7.95

"Application of Information Technology Tools through Satellite - Part II"

"Making of a Newspaper - Part VII : Printing"

"Semiotic Approach to Musical Aesthetics"

21.7.95

"Krein - Milman Theorem"

"Education for Equality - I"

Hindi Telecast

प्रात: 6.00 से 6.30 बजे तक

10.7.95

"लोक शिल्प".

"लास्यकला : ओड़िसी"

12.7.95

"स्क्रीन प्रिंटिंग की कला"

14.7.95

"टाइटेनियम : अद्भुत धातु"

"जुडो : एक प्रतियोगी खेल"

17.7.95

"गांधी : तब और अब"

19.7.95

"उच्च शिक्षा के महत्वपूर्ण लक्षण : कालेज चुनाव"

21.7.95

"उच्च शिक्षा के महत्वपूर्ण लक्षण : मूल्यांकन विधि"

News from Abroad

Religion and Peace

A Declaration on the Role of Religion in the Promotion of a Culture of Peace was adopted at a meeting on "The Contribution by Religions to the Culture of Peace," organized by UNESCO and the Centre UNESCO de Catalunya, at Barcelona recently.

The Declaration

"Deeply concerned with the present situation of the world, such as increasing armed conflicts and violence, poverty, social injustice, and structures of oppression;

Recognizing that religion is important in human life;

We, the participants in the meeting on The Contribution by Religions to the Culture of Peace declare:

Our World

1. We live in a world in which isolation is no longer possible. We live in a time of unprecedented mobility of peoples and intermingling of cultures. We are all interdependent and share an inescapable responsibility for the well-being of the entire world.

2. We face a crisis which could bring about the suicide of the human species or bring us a new awakening and a new hope.

We believe that peace is possible. We know that religion is not the sole remedy for all the ills of humanity, but it has an indispensable role to play in this most critical time.

3. We are aware of the world's cultural and religious diversity. Each culture represents a universe in itself and yet it is not closed. Cultures give religions their language, and religions offer ultimate meaning to each culture. Unless we recognize pluralism and respect diversity, no peace is possible. We strive for the harmony which is at the very core of peace.

4. We understand that culture is a way of seeing the world and living in it. It also means the cultivation of those values and forms of life which reflect the world-views of each culture. Therefore neither the meaning of peace nor of religion can be reduced to a single and rigid concept, just as the range of human experience cannot be conveyed by a single language.

5. For some cultures, religion is a way of life, permeating every human activity. For others it represents the highest aspirations of human existence. In still others, religions are institutions that claim to carry a message of salvation.

6. Religions have contributed to the peace of the world, but they have also led to division, hatred, and war.

We feel obliged to call for sincere acts of repentance and mutual forgiveness, both personally and collectively, to one another, to humanity in general, and to Earth and all living beings. Religious people have too often betrayed the high ideals they themselves have preached.

Peace

7. Peace implies that love, compassion, human dignity, and justice are fully preserved.

8. Peace entails that we understand that we are all interdependent and related to one another. We are all individually and collectively responsible for the common good, including the well-being of future generations.

9. Peace demands that we respect Earth and all forms of life, especially human life. Our ethical awareness requires setting limits to technology. We should direct our efforts towards eliminating consumerism and improving the quality of life.

10. Peace is a journey — a never ending process.

Commitment

11. We must be at peace with ourselves; to achieve inner peace

through personal reflection and spiritual growth, and to cultivate a spirituality which manifests itself in action.

12. We commit ourselves to support and strengthen the home and family as the nursery of peace.

In homes and families, communities, nations, and the world:

13. We commit ourselves to resolve or transform conflicts without using violence, and to prevent them through education and the pursuit of justice.

14. We commit ourselves to work towards a reduction in the scandalous economic differences between human groups and other forms of violence and threats to peace, such as waste of resources, extreme poverty, racism, all types of terrorism, lack of caring, corruption, and crime.

15. We commit ourselves to overcome all forms of discrimination, colonialism, exploitation, and domination and to promote institutions based on shared responsibility and participation. Human rights, including religious freedom and the rights of minorities, must be respected.

16. We commit ourselves to assure a truly humane education for all. We emphasize education for peace, freedom, and human rights, and religious education without fanaticism and exclusivism.

17. We commit ourselves to a civil society which respects environmental and social justice. This process begins locally and continues to national and trans-national levels.

18. We commit ourselves to work towards a world without weapons and to dismantle the industry of war.

Religious Responsibility

19. Our communities of faith have a responsibility to encourage conduct imbued with wisdom, compassion, sharing, charity, solidarity, and love; inspiring one and all to choose the path of freedom and responsibility. Religions must be a source of helpful energy.

20. We will remain mindful that our religions must not identify themselves with political, economic, or social powers, so as to remain free to work for justice and peace. We will not forget that confessional political regimes may do serious harm to religious values as well as to society. We should distinguish fanaticism from religious zeal.

21. We will favour peace by countering the tendencies of individuals and communities to assume or even to teach that they are inherently superior to others. We recognize and praise the non-violent peacemakers. We disown killing in the name of religion.

22. We will promote dialogue and harmony between and within religions, recognizing and respecting the search for truth and wisdom that is outside our religion. We will establish dialogue with all, striving for a sincere fellowship on our earthly pilgrimage.

Appeal

23. Grounded in our faith, we will build a culture of peace based on non-violence, tolerance, dialogue, mutual understanding, and justice. We call upon the institutions of our civil society, the United Nations System, governments, governmental and non-governmental organizations, corporations, and the mass media, to strengthen their commitments to peace and to listen to the cries of the victims and the dispossessed. We call upon the different religious and cultural traditions to join hands together in this effort, and to cooperate with us in spreading the message of peace."

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LALIT

Developing Human Resources of the Book Industry

Abul Hasan*

Hauser Mike (ed.). The Business of Book Publishing : A Management Training Course. New Delhi, Sultan Chand & Sons, 1990. Pp 164. Rs. 150.

Hauser Mike (ed.). Book Promotion, Sales and Distribution : A Management Training Course. New Delhi, Sultan Chand & Sons, 1991. Pp 166. Rs. 150.

Education is the basis of all development and books are the basic tools of education. Hence any programme of Book Development is a positive step towards social progress, national development and international understanding. The best way to promote books is the development of human resources of the book industry — authors, translators, editors, designers, printers, publishers and book distributors.

Revolutionary innovations are taking place all over the world in the management of book production and distribution, such as cost-effective methods, development of reading habits in the face of new electronic media and use of computers and electronic devices to achieve speed and quality in the publishing industry. Owing to the growth of literacy and translation and communication facilities, the book has become an international commodity and book publishing a very competitive profession. To meet the book needs of a country at an affordable cost, it is essential that various components of the industry achieve a certain degree of professionalism and modernity. This calls for a thorough and extensive programme of training for the book industry personnel. The programme may include the establishment of a permanent national institute for the vocational training of various book personnel, inducting Publishing in the university curriculum as a formal discipline and organisation of short-term specialised training courses or, say, author development, translation, editing, designing, publishing and marketing and promotion of books. Such training should not only be relevant to the needs of a particular country, but be made available, as far as possible, with the resources at the disposal of the country.

Any training programme for the book industry pre-supposes the availability of training material, specially the book. There are not many books written by the local authors and published in India on the subject of book publishing. However, a number of titles on the subject have come up during the last two decades mainly due to the efforts made by the professional associations of Indian authors, publishers and booksellers. These "books on books" make a general study of the subject and can be helpful to the students of Publishing in a broader way. But they do not serve as a manual to teach or learn the subject, nor are they sufficiently oriented to practical training. The short-term training courses mounted by our book industry associations and other professional institutes, as well as the university courses in Publishing, have therefore to lean heavily on standard English and American books on the subject. A frequently used title "A Guide to Book Publishing" by Datus Smith (now reprinted in India by Oxford and IBH) is a case in point.

An excellent set of manuals on the business of book publishing has lately been developed by the Book House Training Centre, London and Unesco. It contains three volumes entitled "The Business of Book Publishing", "Book promotion, Sales and Distribution" and "Bookselling". Two of the titles in the series are the subject of this review. Edited by Mike Hauser, a Faculty Member of the Book House Training Centre, the manuals have been widely field-tested through a number of national and regional training courses in their original English version and in many foreign languages used in the developing world so as to ensure their relevance in a broad variety of socio-cultural contexts.

A unique feature of the manuals is that they contain material intended for use both by course instructors and students. Tutors' notes and lecture material have been carefully compiled and sidelined throughout the manuals. All the three titles are profusely illustrated in a form which can be easily photo-copied for classroom use or

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Director, Afro-Asian Book Council,
4835/24 Ansari Road,
New Delhi-110002.

copied onto clear film for use as slides. The presentation is consistent in style, language and layout. While gaining accessibility by appearing in the book format, the manuals retain the spirit of the original teaching material and form a complete and comprehensive presentation of the business of book publishing, bookselling and distribution. As Unesco mentions in the Foreword, these three manuals taken together "provide a comprehensive review of book trade practice as a whole. They offer universities and other training institutions the possibilities of organising short-term training courses for updating skills of *senior management personnel*, and adapting the material for use in curricula leading to tertiary degrees or diplomas in publishing and related subjects".

However the middle-level management personnel or even the senior executives in many countries of Africa and the Asia-Pacific may not equally benefit by these manuals. In these regions, some companies are too small (sometime a one-man show) to practice or even comprehend the guidelines and instructions contained in the manuals. Perhaps for this reason the compilers of the manuals do not claim it to be a definitive work relevant to all situations and circumstances. There is need for similar manuals to be compiled through national initiatives and possibly in local languages. In such cases the manuals under review can serve as stimulants and pace-setters.

The manual on *Book Promotion, Sales and Distribution* does not seem to have taken note of the growing status of international book fairs in the Afro-Asian region. Talking of the book fairs in the Unit "Sales of Subsidiary Rights", Frankfurt has been rightly mentioned as the Number One book fair for the sale of foreign rights in books. Among other important and useful book fairs referred to in the Unit are those held in Jerusalem, Mexico and Rio, but not Zimbabwe and New Delhi World Book Fairs which are equally important. Again, the manuals tend to cover mainly the traditional methods of publishing and bookselling. The development of CD-Roms, computerisation and electronic techniques and devices in book production and distribution are conspicuous by their absence. Then again, a useful part of the first manual on Publishing is its Index, which is missing in the second volume on Promotion. Such minor lapses can be removed if and when a revised edition of the manuals is published.

Sultan Chand & Sons, a well-known educational publishing company in India has done a good service to the South Asian book industry by reprinting these manuals which have been authorised by Unesco for sale in India, Sri Lanka, Bangladesh and Pakistan only. But considering the purchasing power of our students and the fact that the manuals are reprint editions, the price of Rs. 150 each seems to be on a high side. Nevertheless, the compilers and the publishers deserve all praise for turning out such a valuable work which is a must for all those interested in the business of publishing and bookselling and in training the book industry personnel.

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All correspondance should be addressed to **The Director, CEDT, Akampat, Post Box 104, Imphal - 795001 (Manipur).**

davp 1248/3/95

THESES OF THE MONTH

A list of doctoral theses accepted by Indian Universities

HUMANITIES

Philosophy

1. George, Vensus A. **From being-in-the world to being-towards-being: Martin Heidegier's philosophy of the authentic human person.** Madras. Dr Viyagappa Ignatius.

2. Guru Datta. **Vedant kee bhakti parampara main Madhusudan Saraswati ka yogdan.** Durgavati. Dr D N Shukla, Department of Philosophy, Rani Durgavati Vishwavidyalaya, Jabalpur.

3. Khan, Mohd Nooruddin. **A study of the basic philosophical concepts in the literary works of Sir Mohammed Iqbal.** Osmania. Prof P Sitaram Reddy, Department of Philosophy, Osmania University, Hyderabad.

Religion

1. Bhatnagar, Raka. **Swatantrayottar Hindi katha sahitya mein Boddh Dharma darshan ka tathva.** Delhi.

2. Sekhar, B. **Dharma in Sramanic traditions with a special reference to Jaina tradition.** Madras. Dr W D Vasantha Raj.

Fine Arts

Drawing & Painting

1. Patel, Parkash Chander. **Salumber, Mewar ke bhitti chitra: Ek alochnatmak adhyayan.** Vikram. Dr S K Joshi, Department of Drawing and Painting, Madhav College, Ujjain.

Music

1. Beniwal, Usha. **Raahtriya ekta ke sandarbh mein Bhartiya lok sangeet kee bhoomika: Ek vivechnatmak adhyayan.** Kurukshetra.

Drama

1. Bhuvanendran Nair, S. **A study of the political concept in Malayalam plays with special reference to those from 1925 to 1950 based on production and audience response.** Calicut. Dr Vayala Vasudevan Pillai, School of Drama, Dr John Mathai Centre, Aranattukara, Trichur.

Language & Literature

English

1. Ahluwalia, Neeti. **What Does Cloze Measure: Language proficiency or cognitive abilities.** Delhi.

2. Chidambarakumarasamy, K R. **Family relationship as the shaping spirit in John Draine's novels: A psychological study.** Madras. Dr R Shanmugasundaram.

3. Desikan, Vani. **Feeling Dragged Upon and Buoyant: The poetry of Seamus Heaney.** Madras. Dr M S Nagarajan.

4. Duara, Srutimala. **Dickens and education.** Gauhati. Dr H Gohain.

5. Dutta, N Nalini. **Humanism in the four selected novels of Bernard Malamud.** Andhra.

6. Gehlot, Hemant. **Evil in short fiction of William Faulkner.** Vikram. Dr S R Julka, Bhaktana, Dusshera Maidan, Ujjain.

7. Kalyani Shanthi, M D K. **The Oeuvres of C N Annadurai, Jack London and Stephen Crane: A critical and comparative study.** Madras. Dr V K Padmanabhan.

8. Mahajan, Sushila. **Fusion of romanticism and classicism in the novels of Jane Austen.** Durgavati. Dr D K Moitra, Prof (Retd), 8, Sunny Apartments, Narmada Road, Jabalpur.

9. Mehta, K H. **V S Naipaul: A critical study of his narrative art.** Saurashtra. Dr A K Singh.

10. Packiaraj, G. **A critical study of the apocalyptic vision of Walker Percy.** Madras. Dr Anand Kumar Raju.

11. Pushpa, K. **The Wounded Psyche: A socio-psychological study of Soyinka's plays.** Madras. Dr M S Nagarajan.

12. Rose, Sanjeev Samuel. **Modes of salvation in Isaac Bashevis Singer's fiction.** Calicut. Dr R Viswanathan, Department of English, University of Calicut, Calicut.

13. Seetha, B T. **Ed Bullins and Aime Cesaire: Quest for a new reality.** Osmania. Prof Isaac Sequeira.

Sanskrit

1. Chacko, K U. **Materialism in Indian philosophy.** Calicut. Dr M S Menon, Raja Villa, Thruvannur Nada, Calicut.

2. Goswami, Bimal Kumar. **Amarkosh O tatkaleen Bharatiya sanskriti.** Burdwan. Prof B Mukherjee, Department of Sanskrit, University of Burdwan, Burdwan.

3. Kalley Prasanth. **Alankara Muktavali: A critical edition and study.** Madras. Dr C S Radhakrishnan.

4. Purohit, J G. **An interpretative study of Srimad Bhagavata.** Saurashtra. Dr M V Joshi.

5. Rajalakshmi, S. **Vasumangalanataka of Perusuri: A critical edition and study.** Madras. Dr M V Nalini.

6. Sarala, K K. **The contributions of Kerala to Advaita Vedanta.** Calicut. Dr K N N Elayath, Department of Sanskrit, University of Calicut, Calicut.

7. Sehgal, Rajni. **Vrihaddevatagat akhyan: Ek sameekshatmak adhyayan.** HP.

8. Sharma, Dinesh Kumar. **Vithal Budhkar ka Advait sahitya: Ek sameekshatmak adhyayan.** Vikram. Dr Shobhnath Nene, Lecturer, Department of Sanskrit, Vikram University, Ujjain

9. Sridhar, M K. **Myths and legends of Mahabharata.** Bangalore. Dr T S Ramakrishna Rao, Director, Bharatiya Vidya Bhavan, Crater 525 Fedregal De San Angel, Mexico.

10. Srinivasan, Rajalakshmi. **Nominal compositions in Sanskrit and Tamil: A comparative study.** Madras. Dr Siniruddha Dash.

11. Venkateshappa, H. **Trade and commerce in the Arthasastra of Kautilya.** Bangalore. Dr Sugnana Murthy, Reader, Department of Sanskrit, Bangalore University, Bangalore.

Punjabi

1. Mangal Singh. **Punjabi novel vich parivarik sambandhan da vishleshan.** Kurukshetra.

Hindi

1. Aravindan, M. **The contribution of poets to the development of Hindi novel with special reference to sixties.** Calicut. Dr R Surendran, Department of Hindi, University of Calicut, Calicut.

2. Bhoi, Raojibhai Shankarbhai. **Gujarat ke Dadupanthi sahitya ka Hindi ko yogdan.** Patel. Dr R H Patel.

3. Das, Nagesh Nath. **Madhyakaleen sant kaviyon ka kavyadarsh: Siddhant evam anuprayog.** Delhi.

4. Kande Shivasharanappa, S. **Kavi Sri Kedarnath Komal ka vyaktitva aur krititva.** Bangalore. Dr Nirmala Prabhu, Department of Hindi, Bangalore University, Bangalore.

5. Lekh Raj. **Bharmauri lok sahitya ka sanskritik anusheelan.** HP.

✓ 6. Malik, Ifft Maab. **Sufi kavya kee alochna kee samalochna.** Jamia. Prof Majeeb Husain Rizvi, Department of Hindi, Jamia Millia Islamia, New Delhi.

7. Mumtaz, R. **The social problems in Hari Krishna.** Madras. Dr Sarada Ramani.

8. Parmar, Rajani Brijlalsingh. **Yashpal ke katha sahitya mein abhivyakta Marxvadi jeevan darshan ka anusheelan.** Nagpur. Dr M M Kadu, Department of Hindi, Nagpur University, Nagpur.

9. Patel, Suresh. **Dr Laxminarayan Lal: Vyakti aur sahitya.** Vikram. Dr Harimohan Budholiya, Prof, Department of Hindi, Vikram University, Ujjain.

10. Pushpa Devi. **Vrindavan Lal Verma ke upanyason mein itihas aur rashtriyata ka swaroop.** HP.

11. Ram Mehar Singh. **Haryani sangit ka udbhav aur vikas.** Kurukshetra.

12. Shabina Anjum. **Kabir aur Meera ke kavya mein abhivyakta prem darshan: Ek tulnatmak adhyayan.** AMU. Dr R C Sharma.

13. Sharma, Ramanuj. **Chhattisgarhi kriyaon kee vyakarnikata.** Ravishankar. Dr Chittranjan Kar, Reader, School of Studies in Linguistics, Pt Ravishankar Shukla University, Raipur.

14. Verenkar, Shobha. **Sathottari Hindi upanyason ka shilpa vikas.** Goa. Dr B R Mishra.

Urdu

✓ 1. Akhtar, Jameel. **A critical study of fiction of Qurratul-ain Haider.** JNU. Dr Naseer Ahmad Khan, Centre of Indian Languages, Jawaharlal Nehru University, New Delhi.

2. Nayyar Jahan. **Shibli Bahaisiat sayaneh nigaar: Ek tanqidi mutala.** Jamia. Dr Sughra Mehdi, Department of Urdu, Jamia Millia Islamia, New Delhi.

3. Sarosha Nasreen Quazi. **Allama Mehvi Siddiqui Lakhnavi: Hayat aur karname.** Nagpur. Prof M A Rahmatullah, Shri V P Naik Government Institute of Arts and Social Sciences, Nagpur.

Bengali

1. Chakraborty, Amalendu. **Nalinikanta Gupta and his contribution to Bengali literature.** Gauhati. Dr D Sen, Reader, Department of Bengali, Gauhati University, Guwahati.

2. Das, Kamala. **Bonkimchandrer upanyaser bhasashailee: Baichitrya o bibartan.** Burdwan. Dr S Chakraborty, Department of Bengali, University of Burdwan, Burdwan.

3. Ghosh, Kanan Behari. **Rabindra kabitar bipareet sroat: Jatindranath Mohitlal.** Burdwan. Dr B K Dutta, Department of Bengali, University of Burdwan, Burdwan.

4. Ghosh, Samarendranath. **Bangla upanyasey Brahma prasanga.** Burdwan. Dr R D Bose, Department of Bengali, TDB College, Raniganj.

5. Mahato, Kshriod Ch. **Bangla mangalkabya Baishnab prabhab.** Burdwan. Dr R R Chatterjee, Department of Bengali, University of Burdwan, Burdwan.

6. Roy, Chitra. **Baishnab sanskriti o sahitya : Gobinda, Madhava O Basudev Ghosh.** Burdwan. Dr M Choudhuri, Department of Bengali, University of Burdwan, Burdwan.

Assamese

1. Gogoi, Banti Rani. **Socio-cultural life of the Turungs.** Gauhati. Dr J N Phukan.

2. Rabha, Rajat Chandra. **A descriptive analysis of the Dhudnoi dialect of Assamese.** Gauhati. Prof R K Mahanta.

Marathi

1. Bodewar, Ramchandra G. **Natakkar V R Habarde: Ek abhyas.** Nagpur. Dr A D Welankar, Lecturer, S B City College, Nagpur.

2. Swan, Shamsunder W. **Javi B : Ek chikitsak adhyas.** Nagpur. Dr M S Wabagaonkar, Department of Marathi, Nagpur University, Nagpur.

Gujarati

1. Ved, Geeta Ramesh. **A comparative study of Gujarati and Hindi short stories after 1950.** Baroda.

Persian

1. Rahat Mahmooda. **The contribution of the house of Qadi Badruddaulah to Persian literature.** Madras. Dr Syed Safiullah.

Arabic

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2. Mohamed Sulaiman. **Arabic and Islamic studies in Tamil Nadu since 1857.** Madras. Dr P Nisar Ahmed.

Tamil

1. Alamelu, V. **Tamil-P-Pavialil uruvaga ani.** Madras. Dr N Gadigachalam.

2. Devakala Jothimani, D. **Origin and development of Tamil bakthi movement in the light of Biblej.** Madras. Dr S Innasi

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Telugu

1. Ambruni, A. **Verb morphology of Ranganatha Ramayanamu.** Madras. Dr P Uma.

2. Anantharamulu, A. **Kapilavai Lingamurthy: Jeevitamu rachanalu.** Osmania. Dr K Venkat Reddy, Department of Telugu, Osmania University, Hyderabad.

3. Kolar, Bhaskara Panthulasrilakshmi. **Athreya cine geethalu: Oka pariseelana.** Krishnadevaraya. Dr M K Devaki, Department of Telugu, Sri Krishnadevaraya University College, Anantapur.

4. Satyanarayana, Bandi. **Pothana Bhagavatamu: Janapadulu tulanatmaka pariseelana.** Andhra.

5. Sreenivasulu, T. **Annamayyn Sankirtanalu: Sangita dharani.** Madras. Dr S Akki Reddy.

6. Tolanur, M N. **Adhunik samajik chetana ke sandarbh mein Kabirdas evam Basaveswara kee kavityon ka tulanatmak adhyayan.** Bangalore. Dr P K Vamadev, Department of Hindi, K L E Society's S Nijalingappa College, 2nd Block, Rajajinagar, Bangalore.

7. Vijayalaxmi, A. **Women novelists: Women movements.** Madras. Dr P Uma.

Geography

1. Anandhi, J Maria Anita. **In-migrants of Madras City: Their place of origin and temporal aspects, socio-economic profile and residential preferences.** Madras. Dr (Mrs) Vasantha Viswanath.

2. Bhavani, R. **Rural regional development, energy and envionment: A case study of North Arcot District.** Madras. Dr S Subbaiah.

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History

1. Ambikeswari, M S. **Road and road transport in Tamil Nadu, 1900-1961.** Madras. Dr V Balambal.

2. Aswathanarayana. **Social reform movements in Princely Mysore, 1860-1940.** Bangalore. Dr S Chandrashekar, Department of History, Bangalore University, Bangalore.

3. Bhuvaneswari, R. **The early English Press of the Madras Presidency, 1785-1885.** Madras. Dr R Thandavan.

4. Borkar, Sangita Manohar. **Bhartiya swatantraya sangramateel Marathi vritpatrache yogdan, 1885-1920.** Nagpur. Dr K A Shete, Department of History, Nagpur University, Nagpur.

5. Jaya Selva Doss, M. **History of Padaividu Rajyam: A study.** Madras. Dr G W Carnelius Manoharan.

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8. Shrivastava, Raj Narain. **Maikal kshetra kee murtikala ka adhyayan, 600 isvi se 1200 isvi tak: Shahdol Jile ke vishesh sandarbh mein.** Durgavati. Dr S K Sulleray, Department of Ancient Indian History, Culture and Archaeology, Rani Durgavati Vishwavidyalaya, Jabalpur.

9. Sitaramamma, J. **History of Mahayana Buddhism in South East Asia.** Nagarjuna. Dr V V S Saibaba, Department of Philosophy and Religious Studies, Andhra University, Visakhapatnam.

10. Subramanya Raju, D. **Dr Channa Reddy: A study.** Madras. Dr V K Padmanabhan.

11. Thekedam, Joseph Sebastian. **The Travancore State Congress and the struggle for responsible Government in Travancore, 1938-1947.** Nagpur. Dr S V Kothekar, Department of History, Nagpur University, Nagpur.

12. Tiwari, Dinesh Chander. **Rashtra ke Amar Shahid swatantrata andolan ke pramukh Senani Neta Jee Subhash Chandra Bose ka vyaktitva evam unki uplabhdiyan.** Vikram. Dr H L Goyal, Prof, Department of History, Government College, Mandsaur.

13. Yenose, R. **The Congress Government and its administration in Tamil Nadu, 1952-1967.** Madras. Dr R Thandavan.

14. Zohra, K. **The Maras of Mizoram: A study of their history and culture.** Gauhati. Dr J N Phukan.

Adarsh Education Society's

ARTS, COMMERCE & SCIENCE COLLEGE

Hingoli-431 513, Disst. Parbhani

WANTED

Applications alongwith the true copies of the certificates/testimonials are invited from ST/SC & General Candidates for the following posts in SENIOR COLLEGE, so as to reach undersigned **within ten days** from the date of publication of this advertisement.

1. One full time Lecturer in Dairy Science.
2. One full time Lecturer in Hindi.
3. One part time Lecturer in Political Sci. (Likely to become full time if div. granted)

Qualifications & Pay Scales : As per Swami Ramanand Teerth Marathwada University, Nanded & UGC rules.

Posts are reserved for ST and SC candidates. It may be changed as per Govt. directions. If candidates from particular reserved category are not available the same will be filled in from other reserved category candidates for ONE academic year only.

K.K. Dube
(President)

Dr. J.M. Mantri
(Principal)

CLASSIFIED ADVERTISEMENTS

CORPORATE EDUCATIONAL AGENCY
DIOCESE OF KOTHAMANGALAM

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Pavanatma College, Murickassery]

WANTED

Applciations are invited from eligible candidates for the posts of Lecturer in Physics for substantive/leave vacancies, actual and possible in the Colleges under the Corporate Educational Agency, Diocese of Kothamangalam. Selections will be made both on general and community merit.

Applications with Biodata and qualifications are to reach the Manager of Colleges, Bishop's House, Kothamangalam-686691, **within a month** of this notification. Application fee of Rs. 50/- may be sent as M.O. coupon, Postal Order or Postal Stamps.

MANAGER

NORTH EASTERN REGIONAL INSTITUTE OF SCIENCE & TECHNOLOGY
NIRJULI : ARUNACHAL PRADESH

M.H.R.D. GOVT. OF INDIA

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Applications in the prescribed form are invited from Indian citizens belonging to the Scheduled Castes/Scheduled Tribes for the following positions in the pay scales noted against each.

Assistant Professor	**Total Posts - 12**
a) Agril. Engg.	2 posts (SC - 1, ST - 1)
b) Civil. Engg.	1 post (SC - 1)
c) Electronics Engg.	1 post (SC - 1)
d) Mech. Engg.	2 posts (SC - 1, ST-1)
e) Chemistry	2 posts (SC-1, ST-1)
f) Mathematics	2 posts (SC-1, ST-1)
g) Physics	2 posts (SC-1, ST-1)

Pay Scale : Rs. 3700-125-4950-150-5700/-. **Age limit** - 45 years. **Educational Qualification** : A consistently good academic record with a Doctoral Degree in the relevant field. About 5 years experience in teaching and in research and development. Candidates not possessing Ph.D. in Engineering/Technology may also be considered if they have to their credit equivalent published work of high standard in an institution or in an Industry.

Lecturer	**Total Posts - 28**
a) Agril. Engg.	1 post (ST-1)
b) Civil Engg.	2 posts (SC-1, ST-1)
c) Electronics Engg.	5 posts (SC-3, ST-2)
d) Elect. Engg.	3 posts (SC-3)
e) Mech. Engg.	3 posts (SC-1, ST-2)
f) Computer Sc.	2 posts (SC-2)
g) English	2 posts (ST-1, SC-1)
h) Economics	1 post (ST-1)
i) Chemistry	3 posts (SC-2, ST-1)
j) Mathematics	3 posts (SC-2, ST-1)
k) Physics	3 posts (SC-3)

Pay scale : Rs. 2200-75-2800-100-4000. **Age limit** : 40 years. **Educational Qualifications** : First Class Bachelor's Degree in appropriate branch of Engineering and Technology or First Class Master's Degree in appropriate branches of Study in Humanities and Sciences (ii) Qualifying in an All India Examination (Such as GATE or equivalent).

SHIVAJI UNIVERSITY, KOLHAPUR

Admission Notice

Candidates desirous of taking admission to the following courses should apply to the **Registrar, Shivaji University, Kolhapur** in the prescribed form on or before **15th Sept., 1995**. Application forms alongwith prospectus can be had from The General Manager, Shivaji University Central Co-op. Consumers Stores Ltd. C/o Shivaji University, Vidyanagar, Kolhapur-4 in person or by sending necessary amount by D.D./I.P.O / M.O. (Dip. in Adult Edn. Rs. 20/- & Dip. in Pop. Edn. Rs. 20/-)

Courses :

Correspondence Cum Contact Course one year in

1. Diploma Course in Adult Education.
2. Diploma Course in Population Education.

Basic qualifications : Post-Graduate Degree (II Class) or B.Ed. those who are already working in the field of adult education. (Attach Experience Certificate)

Candidates will have to come to Kolhapur & attend the contact course for 2 weeks in the Diwali Vacation.

Vidyanagar,
Kolhapur-416 004.
Date: June, 1995

Dr. B.P. SABALE
REGISTRAR

INDIAN NATIONAL SCIENCE ACADEMY

Bahadur Shah Zafar Marg, New Delhi-110 002

INVITATION FOR NOMINATIONS

1996

INDIRA GANDHI PRIZE FOR POPULARIZATION OF SCIENCE

The Prize will be awarded for outstanding work by an individual for the popularization of science **in any Indian language, including English**. The prize consists of Rs. 10,000/- in cash and a bronze medal. Conditions for award and nomination forms can be obtained from Executive Secretary, Indian National Science Academy, Bahadur Shah Zafar Marg, New Delhi-110 002. The **last date** for receipt of nominations in the Academy is **15th July 1995**.

Desirable : (i) A good Master's Degree in appropriate field of Engineering and Technology or Doctorate Degree in the relevant field of Management/Humanities/Sciences.

(ii) About one year experience in teaching/research/industry.

For application forms write to Deputy Registrar (Admin), NERIST, P.O. Nirjuli, Pin Code-791 109, Arunachal Pradesh enclosing a self addressed Rs. 2.50 in crossed Bank Draft on any scheduled bank payable at Nirjuli/Itanagar. Candidates abroad may apply on plain paper.

Age and experience are relaxable as per the prescribed norms.

Applications complete in all respects along with attested/photo copies of the certificates/testimonials should reach the Deputy Registrar (Admin) on the above address on or before 15.8.1995 by Registered Post only.

Incomplete applications and applications received late will not be considered. Last date for issue of application form is 04.08.1995.

P.G. Nair
Deputy Registrar (Admin)

SARDAR PATEL UNIVERSITY

NOTIFICATION NO.: BST (1) 1995-96

Registrar, Sardar Patel University, Vallabh Vidyanagar 388 120 invites the applications in the prescribed form for the following posts.

(A) **Professor** (Scale Rs. 4500-7300)	
1. Computer Science	1
2. History	1
(B) **Reader** (Scale Rs. 3700-5700)	
1. Computer Science	1
2. Chemistry	2
(i) Inorganic/Analytical	
(ii) Organic/Polymer	
3. M.B.A. (Marketing Management)	1
4. Sociology	2
5. Education	1
(C) **Lecturer** (Scale Rs. 2200-4000)	
1. Chemistry	
(i) General (Reserved for SC/ST)	1
(ii) Inorganic	1
2. Hindi (Reserved for OBC)	1

All the posts carry benefits of D.A., G.P.F., Gratuity and Pension as per University Rules.

The prescribed application forms can be had from the University Office on payment of Rs. 20/- (by cash or postal order) in favour of the REGISTRAR, SARDAR PATEL UNIVERSITY. Details of qualifications and job requirements will be furnished alongwith the application forms.

Only one copy of the Mark-sheets be attached with the application.

The last date to receive the applications by the University is **5-8-1995**.

Chandrakant Patel
REGISTRAR

Vallabh Vidyanagar
Date : 22-6-1995

MAR AUGUSTHINOSE COLLEGE
RAMAPURAM
RAMAPURAM BAZAR P.O.
(unaided, Affiliated to M.G. University)

Applications are invited from qualified candidates for the posts of Principal and Lecturers in the following subjects. Those who are eligible shall apply **within 30 days** in the prescribed forms of Rs. 100/-.

1. English, 2. Mathematics, 3. Physics, 4. Electronics, 5. Computer Science, 6. Business Administration, 7. Commerce.

Ramapuram **MANAGER**
3/6/1995

UNIVERSITY OF MADRAS

NOTIFICATION

The last date for issue and submission of filled-in application forms including the Entrance Examination to the following P.G. Courses only in the University Departments for the academic year 1995-96 has been extended upto 14.7.1995.

Master of Arts

1. Indian Philosophy
2. History
3. Economics (Indian Economics)
4. Ancient History and Archaeology
5. French
6. Tamil Language
7 Sanskrit
8. Telugu
9. Malayalam
10. Hindi
11. Urdu
12. Kannada
13. Andragogy
14. Jainology
15. Saivasiddhanta
16. Vaishnavism
17. Christian Studies
18. Political Philosophy
19. Work Education
20. Anthropology
21. Economics (Econometrics)
22. Sociology

Master of Commerce

M.Com. (Business Systems)

Master of Science

Zoology (Vellore) - P.G. Extension Centre

Admission to P.G. Courses in the University Departments will be based on

The University Examination Marks (Part III) only excluding the internal assessment marks.

The Entrance Examination Marks.

The Weightage of University Examination marks and the Entrance Examination marks will be 50% each.

Application can be had from the **Registrar, University of Madras, Madras-600 005** on written requisition with a **Demand Draft** drawn in favour of the **Registrar, University of Madras** in person.

Application form for Entrance Examination and Admission form together with Prospectus ... Rs. 175/-

Filled-in Application for Entrance Examination alongwith Application for Admission, should be sent directly to the Head of the University Department concerned, so as to reach them before the expiry of the last date prescribed and not to the Registrar, University of Madras.

Application for admission to the above course should be sent to the respective Heads of the Department after getting the result of U.G. Examination alongwith the other required certificates within the last date prescribed in the application form.

Those who have already applied and appeared for Entrance Examination need not apply again.

The University reserves the right to start or suspend the conduct of any of the above courses, if the circumstances so warrant.

University Buildings
Chepauk, Madras-600 005

REGISTRAR

PARSHVANATHA VIDYAPEETHA

(Under consideration for Deemed to be University Status by U.G.C.)

I.T.I. Road, Varanasi-221 005

ADMISSION NOTICE

Applications are invited for admission in the following full-time two years Post-Graduate degree courses. Candidates can apply in one application form for alternative courses, giving their preferences.

1. **M.A. in Prakrit Language & Literature**

   Eligibility : Arts graduate/postgraduate with Sanskrit or Prakrit or Pali or Hindi (Apabhramsa) or Philosophy/I.P.R. or Ancient Indian History and Culture or Linguistics.

   Working knowledge of Prakrit is desirable.

2. **M.A. in Jainology** (Jaina Philosophy, Religion, History, Culture, Art & Archaeology)

   Eligibility : Arts graduate/postgraduate with Prakrit or Sanskrit or Pali or Philosophy/I.P.R. or Ancient Indian History & Culture.

3. **M.A./M.Sc. in Stress Management, Clinical Psychology, Health and Yoga.**

   Eligibility : Arts/Science graduate/postgraduate with Psychology or Biology or Philosophy/I.P.R. or Ancient Indian History & Culture or Medical graduate.

4. **M.A. in Ahimsa, Peace and Value Education**

   Eligibility : Arts graduate/postgraduate with Sociology or Political Science or Education or Philosophy/I.P.R. or Ancient Indian History & Culture or Gandhian Studies.

A minimum of 50% Marks (45% for SC/ST/OBC) in Graduation is essential for all courses.

Accommodation : Separate Hostel Accommodation available for limited Girls and Boys candidates.

Scholarship : 10 scholarships in each subject for Rs. 400/- p.m. for Ten Months.

Continuation of scholarship is subject to

(i) Regularity in attendance (75%) and

(ii) Regular passing of the monthly test with a minimum of 50% marks.

Prospectus and application form can be obtained from the **Registrar, Parshvanatha Vidyapeetha** on payment of Rs. 50/- either in cash or M.O.

Last date for receipt of application form is **25th July, 1995**.

Written test and Interview for selection will be held on **31st July, 1995** at 10 A.M. in the Vidyapeeth's campus.

No separate letter will be issued for written Test and Interview.

No T.A. and D.A. will be admissible.

REGISTRAR

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

DIRECTORATE OF DISTANCE EDUCATION

ADMISSION NOTIFICATION FOR B.ED. FOR IN-SERVICE TEACHERS 1995-96

Applications are invited on prescribed proforma given below for admission to Bachelor of Education (B.Ed.) one year degree programme through Distance Education for in-service teachers. The proforma duly filled with relevant documents alongwith non-refundable fee of Rs. 200/- must reach the Asstt. Registrar, Directorate of Distance Education, Maharshi Dayanand University, Rohtak-124 001 (Haryana), through registered post or at the counter **on or before 31.8.1995**. The applications received after prescribed date or incomplete are liable to be rejected. One envelope/packet should contain one application only and the student should mention on the envelope/packet **"APPLICATION FOR B.ED. (D.E.) COURSE 1995-96"**.

Eligibility :

In-service salaried teachers working on full time basis in recognised/Govt. school with minimum one year teaching experience.

Qualifications :

Graduate/Postgraduate degree from a recognised University (UGC/AIU) with at least 40% marks (39.5% will *be rounded* to 40%).

In case of SC/ST minimum pass marks at the qualifying exam. are required.

Seats are reserved for SC/ST candidates as per rule.

Criteria

Admission of working teachers will be on merit drawn on the basis of marks obtained at Graduate/Postgraduate level whatever is higher.

Course Fee

Admitted candidates would be required to deposit Rs. 5000/- alongwith original detailed marks card and *original Migration Certificate if required.*

Statutory Rights of the Directorate

a) Admission cannot be claimed as a matter of right and the Directorate reserves to itself the right to admission.

b) The Directorate will not be responsible for postal delay, if any, involved in receipt of applications or the loss *of applications in postal transit.*

c) All disputes subject to Rohtak jurisdiction.

M.G. Gandhi
DIRECTOR

Library

APPLICATION FORM FOR B.ED. FOR IN-SERVICE TEACHERS, 1995-96

(THIS DIRECTORATE HAS NOT APPOINTED ANY AGENT/REPRESENTATIVE TO COLLECT APPLICATION FORMS AND FEES ON ITS BEHALF. THE CANDIDATES MUST CORRESPOND DIRECTLY WITH THE DIRECTORATE. APPLICATIONS RECEIVED THROUGH ANY AGENCY WILL BE SUMMARILY REJECTED)

Admission No . (Leave Blank)

1 Name
(As given in the degree)
2 Father's Name
3 a Male/Female
b Date of Birth
c Whether belong to SC/ST/BC . . . . (Attach Proof)
4 Full Postal Address Name
Street/Sector . . . City/Village . ...
Teh .. . . . . District . .. . State .. .. PIN Code .. . .
5 Non-Refundable application fee of Rs 200/- paid vide Bank Draft/University Cash Receipt No . . dated . . . .
6 Details of Exam PASSED on the basis of which admission is sought

Name of Exam	Name of Univ	Roll No	Year	Marks Obtained	Max Marks	%age
BA/BSc/BCom						
MA/MSc/MCom						
Shastri/Prabhakar/Other						

Documents to be attached

1 Attested Photo Copies of Marks Sheet

2. Bank Draft drawn in favour of Finance Officer, M D University, Rohtak, payable at S B I M D U Branch Code No. 4734 or in case of cash at the University Counter the original receipt must be attached

7 Courses of Study

The B Ed programme comprises eight courses Paper I, II, III(a), IV, VII and VIII(c) are compulsory papers. The options are available for papers III(b), V & VI Papers VIII(A) & Papers VIII(B) are activity oriented practical papers to be taken by all

III(b) (✓) one of the following

a) Health & Physical Education & Recreation

b) Educational & Vocational Guidance.

c) Audio & Visual Education

d) Adult and Continuing Education.

e) Curriculum & Text Book

Paper V & VI

The candidate will (✓) two teaching subjects given below depending on their subjects at graduation level

	B A.	B Sc	B Com
1.	Eng	Phy.Sc.	Eng
	OR		OR
	Hin		Hin
2	Maths	Maths	Com
	OR	OR	
	S Sc	Life Sc	

Paper VIII (Work Experience) (✓) one from each group A & B

Group-A	Group-B
Vegetable Growing	Embroidery
Growing of Flowers	Knitting
Making Jam, Jellies & Pickles	Preparing Teaching Aids,
	Working with Community

8. (✓) Medium of instruction and examination English ..

OR Hindi . . . . ..

9 List of Enclosures 1. . . ... . 2 . . .
3 . .. 4. ... ...

10 DECLARATION

"I certify that I have .. year(s) and ..... month(s) of teaching experience as full time teacher in school(s) At present I am working as teacher at . . . . (Name and address of the school) and my monthly salary is Rs. . ... The school where I have worked/working is recognised

If the above information is found false my candidature may be cancelled and fee forefeited".

Place . ...

Dated . . ... . (Full Signature of the Applicant)

FOR OFFICE USE ONLY (To be left blank)

Checked and found

1 Eligible with Percentage of Marks

2 Not eligible . Reason . .. .

Clerk Assistant Supdt

SRI RAMACHANDRA MEDICAL COLLEGE
AND
RESEARCH INSTITUTE
(Deemed University)
PORUR, MADRAS - 600 116

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2. RESPIRATORY
3. NEURO
4. RENAL
5. ANAESTHESIA
6. OPERATION THEATRE
7. MEDICAL SECRETARIAL SCIENCES

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2. PHYSICS - CHEMISTRY - BOTANY & ZOOLOGY
3. PHYSICS - CHEMISTRY - MATHEMATICS & COMPUTER SCIENCE

DURATION OF THE COURSE : 3 YEARS (6 SEMESTERS) CLASS & CLINICAL WORK +
1 YEAR OF RESIDENTIAL STIPENDARY INTERNSHIP

REQUISITION LETTERS SHOULD REACH 'THE REGISTRAR' ON OR BEFORE 10TH JULY ACCOMPANIED BY A DEMAND DRAFT FOR Rs. 100/- IN FAVOUR OF 'THE REGISTRAR', SRI RAMACHANDRA MEDICAL COLLEGE & RESEARCH INSTITUTE, MADRAS-600 116.

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